Supplementary Information 2

Self-assembly of fully addressable DNA nanostructures from double crossover tiles

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Sequences for 6×5 lattices with DX tiles I, II, III and IV are given in work sheets named 6×5 lattice I, II, III and IV, respectively.

Sequences for 9×10 lattices with DX tile I are given in work sheet named 9×10 lattices.

Sequences of edge protecting strands and decorating strands for patterns "I, heart and T" are given in work sheets named Protector_I, Protector_Heart and Decorating_T, respectively.

Sequences for infinite-size lattices with DX tiles III and IV are given in work sheets named infinite-size lattice III and IV, respectively.

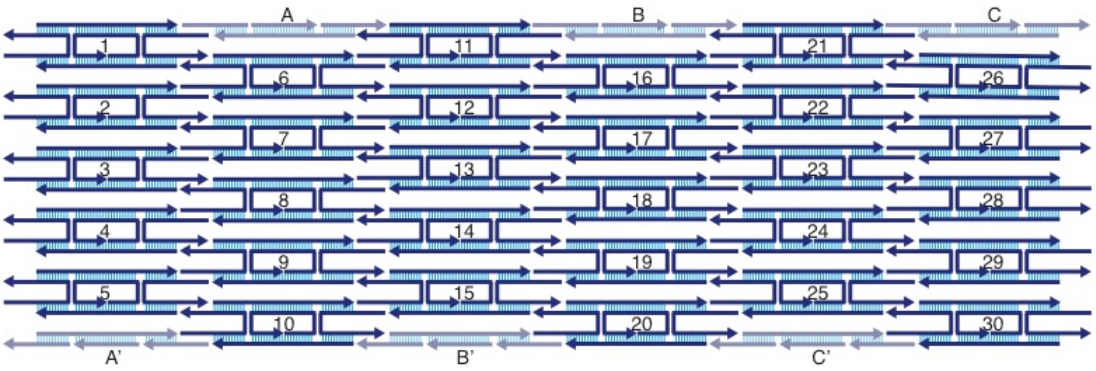

Figure SS1. Strand diagram of a 6×5 lattice.

The name of a strand denotes the DX tile number and strand number in the lattice. For example, a strand named x-y indicates that it is strand y in DX tile x. The full strand diagram of a 6×5 lattice is shown as an example in Fig. SS1. The numbers represent 30 individual DX tiles and the letters represent the upper and lower stitch tiles.

6×5 DX lattice I

1-1	CTGCTACCATACTGGTACTTACAGGATCATGTTATTTGGCGAC
1-2	TTTTTTTTTTACGCTATAACCTATGGTAGCAGTTTTTTTTTT
1-3	TCAATTAGGTACATGATCCTGTAAGTACCAGACAAATGGGCA
1-4	TTTAGGGCACGTCGCCAAATAACACGAGTTATATCCGGGACG
1-5	ATAACTCGTGTACCTAATTGATGCCCATTTGTGGTTATAGCGT
2-1	CAATCGGCCTACATACAACGCCTTCGCCTTCTAGCCGATAGTC
2-2	TTTTTTTTTTGTGTCCGGACCTAGGCCGATTGTTTTTTTTTT
2-3	TCGTCTCTACAGAAGGCGAAGGCGTTGTATGGAGTGGAGGAA
2-4	AGTGTAAACTGACTATCGGCTATGTAATGGTAGTCCGACGTT
2-5	TACCATTACATGTAGAGACGATTCCTCCACTCGGTCCGGACAC
3-1	TTCCGTGAGCGATAGGCTAAGAACGGTTTACGGCTTACTTCGA
3-2	TTTTTTTTTTTCTCAAACGCTCCGCTCACGGAATTTTTTTTTT
3-3	GGGCTAGGACCGTAAACCGTTCTTAGCCTATGAACTCAGTCC
3-4	TCTGGCGAATTCGAAGTAAGCACGTGGTCTATTTACGAGTGC
3-5	ATAGACCACGTGTCCTAGCCCGGACTGAGTTCGAGCGTTTGAG
4-1	GCCCACTTCCCGGTACGCTGCGGAGCCGATGAGCATATGTGGG
4-2	TTTTTTTTTTGCTTGAGAAGCGGGAAGTGGGCTTTTTTTTTT
4-3	AAGAGTGGGTTCATCGGCTCCGCAGCGTACCCTCCAGCCGAG
4-4	TAAGGGTCCGCCCACATATGCTAATGAATCACCAATTACGTG
4-5	GTGATTCATTAACCCACTCTTCTCGGCTGGAGGCTTCTCAAGC
5-1	TCGTTGCTTTGGCCGAAGATCTAGACGACGCCCGACGGGCCTG
5-2	TTTTTTTTTTCGTCACTACAGCAAAGCAACGATTTTTTTTTT
5-3	CTAGGGCTGCGGCGTCGTCTAGATCTTCGGCCCGCCCGGCGC
5-4	CTGCGCCGCACAGGCCCGTCGGCAACGCAAATGTCACGGTGC
5-5	ATTTGCGTTGCGCAGCCCTAGGCGCCGGGCGGCTGTAGTGACG
6-1	ACTCGCGAGCAGCCTCTATGGTGGGCTGATTCCCTCACGGGCC
6-2	AGTTTACACTGATTTAGGTGCTGCTCGCGAGTCGTCCCGGAT
6-3	CGAGCTACGTGAATCAGCCCACCATAGAGGCAGCCAGTTGCT
6-4	AGACCATCGAGGCCCGTGAGGGCACTGCCTCGCCTAAAGCCT
6-5	CGAGGCAGTGCACGTAGCTCGAGCAACTGGCTGCACCTAAATC
7-1	ACATGCTAAGCATATAGCTAAGCGATATATTACAGGACACACG
7-2	ATTCGCCAGAGATACATTTCGGCTTAGCATGTAACGTCGGAC
7-3	GCGCGTCAGTTAATATATCGCTTAGCTATATTCGTAATATGA
7-4	TCTCCAATCACGTGTGTCCTGAATGCGGTCTTCCTGTTCTAA
7-5	AAGACCGCATTACTGACGCGCTCATATTACGACGAAATGTATC
8-1	TAGCGGCGTTGTACTCCTGACTAAATGGGTGGAGGTGGGCTAC
8-2	CGGACCCTTAAGACCAAATCTCAACGCCGCTAGCACTCGTAA
8-3	ATTAATCGGGCCACCCATTTAGTCAGGAGTAGGCTCCGTGTC
8-4	AACTGTAGACGTAGCCCACCTATTAGGGCGAACTCCCTTTAC
8-5	TTCGCCCTAATCCCGATTAATGACACGGAGCCAGATTTGGTCT
9-1	CGAGGGAACGACTGAATATTGAACCCTCAAGCCAGCTCGGGAG
9-2	TGCGGCGCAGTCCACGAAGTGTCGTTCCCTCGCACGTAATTG
9-3	GTTAAGCCCTGCTTGAGGGTTCAATATTCAGCCACGCCTTAT
9-4	GGGATGCCAACTCCCGAGCTGCGTGTCACCGCCGTCAACGAT
9-5	GCGGTGACACGAGGGCTTAACATAAGGCGTGGCACTTCGTGGA
10-1	ACGTACAGGGCGTAATTGCTTCGGCGCGCGATGGCTGACACAG
10-2	TGTTTGCCGCAATAGACAATAGCCCTGTACGTGCACCGTGAC
10-3	CTCGAGCGAGATCGCGCGCCGAAGCAATTACTCTCCTAGGTA
10-4	TTTCTTAAGACTGTGTCAGCCGAATCGCCTGTTTAGACGCCA
10-5	ACAGGCGATTCCTCGCTCGAGTACCTAGGAGATATTGTCTATT
11-1	GTCTATTACCAGCCGGCGTGTGTTACCACGGGTGTATCCGCAA

11-2	TCGATGGTCTACTCATGGCGCTGGTAATAGACACCCTTACTT
11-3	TCAGAAGCCACCCGTGGTAACACACGCCGGCGTGAGCTTCAC
11-4	CCCGGCCGAGTTGCGGATACAGCAATGATGATGGAATGTGTC
11-5	ATCATCATTGCTGGCTTCTGAGTGAAGCTCACGCGCCATGAGT
12-1	TACTACCCATTACCCTGATGTTCCCGACCAAACACGATTGTTG
12-3	AGGGCGGATGTTTGGTCGGGAACATCAGGGTCTGTCGAAGCT
12-4	CACTAGGGAACAACAATCGTGAAACGTGATTTAGTGGTTAGC
12-5	TGATTGGAGACGGCATGCGTCAATGGGTAGTAAGGCTTTAGG
12-5	AAATCACGTTTCATCCGCCCTAGCTTCGACAGGACGCATGCCG
13-1	AGGTGGTCCGTGGCGAGGATCCACAGGGAAATTTACACTGGAC
13-2	GTCTACAGTTAACCAGAGCTAACGGACCACCTTTAGAACAGG
13-3	GGGCAATCCCATTTCCCTGTGGATCCTCGCCCGGTTTACTGC
13-4	GCAGGGCCTGGTCCAGTGTAAGTGGCGTTCAGCTTCGCGTTA
13-5	CTGAACGCCACGGGATTGCCCGCAGTAAACCGTAGCTCTGGTT
14-1	CCTTAATGCCCTTGTGACCTCTGGAGTACATAATTGTGCATTT
14-2	TTGGCATCCCAACGGCAGGGCGGGCATTAAGGGTAAAGGGAG
14-3	TCCTTGATGCTATGTACTCCAGAGGTCACAATATAATATGGT
14-4	TCGCCCGCATAAATGCACAATGAACGATACAGCCGGAAGCTG
14-5	CTGTATCGTTCGCATCAAGGAACCATATTATAGCCCTGCCGTT
15-1	TCCAAGGGTGTCGCGTATCCGCAGTCCGGTCAATGGTTACCGC
15-2	TCTTAAGAAATATCAGGACCCACACCCTTGGAATCGTTGACG
15-3	TTTACATTGGTGACCGGACTGCGGATACGCGACAGTTACACA
15-4	GGTGACCTTCGCGGTAACCATCCTTCGCAGGCGACGATACAC
15-5	GCCTGCGAAGGCCAATGTAAATGTGTAACTGTGGGTCCTGATA
16-1	GTGAGCTTTAAGATGGTGCCCTCGGTGCGACACGGGCAATATC
16-2	TTCCCTAGTGATTTCACTCACTTAAAGCTCACGACACATTCC
16-3	GACCGACGCATGTCGCACCGAGGGCACCATCGAGAGGTGGTG
16-4	CATACAGCTTGATATTGCCCGTCCAACTGGGTATATAATGGG
16-5	ACCCAGTTGGATGCGTCGGTCCACCACCTCTCGTGAGTGAAAT
17-1	CAGCCCTCAGTCTCGCGCTTCGCCGCGAGGGCGAACTTTAACA
17-2	CAGGCCCTGCAAGACTATCTCACTGAGGGCTGGCTAACCACT
17-3	AACGGCGCTTGCCCTCGCGGCGAAGCGCGAGCGGTCGGCGCT
17-4	GGTAGGGAGATGTTAAAGTTCCCGATCGCGTAGCAGGAAAGA
17-5	TACGCGATCGGAAGCGCCGTTAGCGCCGACCGGAGATAGTCTT
18-1	AAGCGGCGTTAAATAAAGGCATTTCTTGCGCGCGGGTTCTAGG
18-2	ATGCGGGCGATCAACCCTCAGTAACGCCGCTTTAACGCGAAG
18-3	GACGACATTTCGCGCAAGAAATGCCTTTATTCCATTCATATG
18-4	CTTATCCGTACCTAGAACCCGCTAGCAAAGAATGAGATTTGG
18-5	TTCTTTGCTAGAAATGTCGTCCATATGAATGGCTGAGGGTTGA
19-1	GAACCTTCGTCATCTGAAACACACAACTCGTTAAGCCGGGTGT
19-2	GAAGGTCACCAGCGCACGAGAGACGAAGGTTCCAGCTTCCGG
19-3	CTAAAGTTGTAACGAGTTGTGTGTTTCAGATCAAATACTCCT
19-4	AAGATATCCTACACCCGGCTTTGAAATCTAGGTGATTTGCGC
19-5	CCTAGATTTCAACAACTTTAGAGGAGTATTTGTCTCGTGCGCT
20-1	GGTCCCTGAAACACTTAATGTTTGGACAGCATGTTACCGCCTT
20-2	CACGGCAGGATTATTTAGTAGTTTCAGGGACCGTGTATCGTC
20-3	CACTTCCCTCATGCTGTCCAAACATTAAGTGTTGGTTATAGG
20-4	CCAGGTCAGCAAGGCGGTAACCGTTACAGGCTCCAATAACAA
20-5	AGCCTGTAACGGAGGGAAGTGCCTATAACCAACTACTAAATAA
21-1	CGGCTTATAGGGCATAGCCATCAACAGATGCGCGTTCATTAGG
21-2	AAGCTGTATGTAGATGTCCTACCTATAAGCCGGTCTGGGCAA
21-3	GTCGGACTGGCGCATCTGTTGATGGCTATGCCGAAGTTTAGG

21-4	ATATGAACTTCCTAATGAACGGTCTTACACCGCTTACACGAT
21-5	CGGTGTAAGACCCAGTCCGACCCTAAACTTCGTAGGACATCTA
22-1	CCCGACACGAGCGACAAACCCTAAGTACGCAACCATGAGCCAT
22-2	TCTCCCTACCCTTAACTCGTGCTCGTGTCGGGCCCATTATAT
22-3	AGTTTGCAATTTGCGTACTTAGGGTTTGTCGTCAGTGTGAAG
22-4	TATCTTCTCGATGGCTCATGGTCTCTTGAAATAGTTCGGTAC
22-5	ATTTCAAGAGAATTGCAAACTCTTCACACTGACACGAGTTAAG
23-1	GCGTCACCACCGCTACCTCAACGTGATCGTAGAGCGATGGAAT
23-2	TACGGATAAGGCATCCCGTCTGGTGGTGACGCTCTTTCCTGC
23-3	AAGCGGTACCCTACGATCACGTTGAGGTAGCACGATGGCATT
23-4	AGAGAGCCTCATTCCATCGCTGACTCCGCAAGGCGTGCGTGT
23-5	CTTGCGGAGTCGGTACCGCTTAATGCCATCGTAGACGGGATGC
24-1	TTTCGGACCTACCAGAGCGAAGGAGACACGCTTACTAGGGCTG
24-2	AGGATATCTTCGGCTCTCGACTAGGTCCGAAACCAAATCTCA
24-3	ATTAGAGAATAGCGTGTCTCCTTCGCTCTGGGTATATAACCG
24-4	CGCGCCGTTTCAGCCCTAGTAATCTATCCACTACCGTCTAAC
24-5	AGTGGATAGATATTCTCTAATCGGTTATATACGTCGAGAGCCG
25-1	AGAGTACTAGGCCCTGGCTTCTGGGTCGTAGATGGAGTCCCTC
25-2	GCTGACCTGGTTCCCTTCTTTCCTAGTACTCTGCGCAAATCA
25-3	AAGTAAGACGTCTACGACCCAGAAGCCAGGGCGACCCTTTGC
25-4	ACTATACTGCGAGGGACTCCAACCCATGCCCTGAGTTAACAT
25-5	AGGGCATGGGTCGTCTTACTTGCAAAGGGTCGAAAGAAGGGAA
26-1	GTCCAAATATCGACTATCCTCACGAGCTGCACCAGCTATGGTC
26-2	CGAGAAGATATCTCTATATAAGATATTTGGACATCGTGTAAG
26-3	AAGCAAGGTAGTGCAGCTCGTGAGGATAGTCGCACTGTCGAC
26-4	TTTTTTTTTTGACCATAGCTGCTGAGGGACTTTTTTTTTTTT
26-5	AAGTCCCTCAGTACCTTGCTTGTCGACAGTGCTTATATAGAGA
27-1	ATGTCGGCGTATCTTAAGAACACATTTATCGTACCACATTGGG
27-2	GAGGCTCTCTCCAGTCACAGGTACGCCGACATGTACCGAACT
27-3	TAGAAGAAATACGATAAATGTGTTCTTAAGATGTTATGGTCT
27-4	TTTTTTTTTTCCCAATGTGGTTGATCTGTGTATTTTTTTTTT
27-5	TACACAGATCAATTTCTTCTAAGACCATAACACCTGTGACTGG
28-1	GCCCTGAACTCTGTACACTAAGTATCTATTGCTCCCTTTACAC
28-2	AAACGGCGCGCATCCCGAAAGGAGTTCAGGGCACACGCACGC
28-3	CTTCCTTTCTGCAATAGATACTTAGTGTACACGCTGAGTCCG
28-4	TTTTTTTTTTGTGTAAAGGGAGAGGACTACCGTTTTTTTTTT
28-5	CGGTAGTCCTCAGAAAGGAAGCGGACTCAGCGCTTTCGGGATG
29-1	GATGACACGCACCTAAGCTTACCCTCGATCTCCAACCTCCAGA
29-2	GCAGTATAGTCTGCGTCTCCATGCGTGTCATCGTTAGACGGT
29-3	CTATCGCCAAGAGATCGAGGGTAAGCTTAGGGCCTGGTACTG
29-4	TTTTTTTTTTTTCTGGAGGTTGAGGTTCGTTTATTTTTTTTTT
29-5	TAAACGAACCTTTGGCGATAGCAGTACCAGGCTGGAGACGCAG
30-1	GCGAACCTGTTGCCGGTGCACGACAGGATCTGCCCGAAATTGG
30-2	TCGCCTGCCCTCCTATCTACCAACAGGTTCGCATGTTAACTC
30-3	GGCAGACCATCAGATCCTGTCGTGCACCGGCCACAACGCGTG
30-4	TTTTTTTTTTCCAATTTCGGGCGGTCCTTCGCTTTTTTTTTT
30-5	GCGAAGGACCGATGGTCTGCCCACGCGTTGTGGGTAGATAGGA
A-1	GTGCCCTAAAGTGAATAAATT
A-2	GAGACGTCGCCCAGACCTCAA
A-3	CTTGCCTTTACAAGTAAGGGT
A-4	GTAAAGGCAAGTTGAGGTCTGGGCGACGTCTCAATTTATTCAC
B-1	CTCGGCCGGGAAGACCCATTT

B-2	AGAGGCAGGCTAAATTAGACT
B-3	CTAAAGGGAAGTTGCCCAGAC
B-4	CTTCCCTTTAGAGTCTAATTTAGCCTGCCTCTAAATGGGTCTT
C-1	AAGTTCATATAGTGGTAATAA
C-2	TAATATAGTAGGCTAAGCAAC
C-3	TCGTCCTTATCTTTTTTTTTT
C-4	GATAAGGACGAGTTGCTTAGCCTACTATATTATTATTACCACT
A'-1	GTACCTCGCCCTCAAAGAAAGCATTTGTTACACATAGTTATCG
A'-1	GCGGCAAACACGATAACTATG
A'-2	TGTAACAAATGCTTTCTTTGA
A'-3	GGGCGAGGTACTTTTTTTTTT
B'-1	AATACAACGGATGCAATCCCAAAGCTCTCCTGGATCGCCGTGA
B'-2	TCCGTTGTATTTGGCGTCTAA
B'-3	CAGGAGAGCTTTGGGATTGCA
B'-4	TCCTGCCGTGTCACGGCGATC
C'-1	TTCCACAAAGGGTTCTCAGCTTGTCGTATTTCTGCAGAGATAC
C'-2	CCTTTGTGGAATTGTTATTGG
C'-3	GAAATACGACAAGCTGAGAAC
C'-4	GGGCAGGCGAGTATCTCTGCA

6×5 DX lattice II

1-1	TGTGCATCCCTAGAAGGTTGAAACGGATCAA
1-2	TTTTTTTTTTTGGAGCACCACGGGATGCACATTTTTTTTTTT
1-3	TCAACCTTCTACAAGATGGTCG
1-4	GTCGCGTGCAATTGATCCGTTGTTGTTGACCTGCAGGTAGGA
1-5	GGTCAACAACCGACCATCTTGGTGGTGCTCC
2-1	GTCATGGGAAACCGTCGGCCGCCAATTTCGA
2-2	TTTTTTTTTTTTTCTGGAAGAATTCCCATGACTTTTTTTTTTT
2-3	CGGCCGACGGTGTGTTGTAGCT
2-4	GAGTCTTAACGTCGAAATTGGTCCAGCCCGGCTACTTACCCT
2-5	CCGGGCTGGAAGCTACAACACTTCTTCCAGA
3-1	AGAGGGTTCCCTTAGGACTCTGATTCTTTCG
3-2	TTTTTTTTTTTTGGGAAGTCTTGGAACCCTCTTTTTTTTTTTT
3-3	AGAGTCCTAAGTGTAGCGACTT
3-4	ATCGTGTAAATCGAAAGAATCCGGAGTGATGGACTATCCTCG
3-5	CATCACTCCGAAGTCGCTACAAAGACTTCCC
4-1	ATCGTTGCGAACCAGGTCGAGGTTCCGCCGG
4-2	TTTTTTTTTTTTCGCAACAGATTCGCAACGATTTTTTTTTTTT
4-3	CTCGACCTGGTCTATGCTTCCA
4-4	CTAAACACTCGCCGGCGGAACGTCGAATGCGAGTCAGGAGCT
4-5	CGCATTCGACTGGAAGCATAGATCTGTTGCG
5-1	GTGGAAATGTGACCCGGAATGCGCCCTCTTT
5-2	TTTTTTTTTTTTGACAAACCGTACATTTCCACTTTTTTTTTTT
5-3	CATTCCGGGTCGGTTCACTCGT
5-4	GGTGCCTGGCCAAAGAGGGCGACAGCTGCACATGTTTACGGA
5-5	GTGCAGCTGTACGAGTGAACCACGGTTTGTC
6-1	CTCATATGAAAGAGGGAGATACGATGTCCAC
6-2	CGTTAAGACTCCCTGTCGGTCTTCATATGAGTCCTACCTGCA
6-3	TATCTCCCTCTCTGCATACGAG
6-4	TCTGAATTCGTGTGGACATCGGAAATGCCCTGGTAAAGATTA
6-5	AGGGCATTTCCTCGTATGCAGGACCGACAGG
7-1	CCAAAGGTAAGGGCCTCCGCCCTACTCCGCC
7-2	ATTTACACGATGGCCGTAGTCTTACCTTTGGAGGGTAAGTAG
7-3	GGCGGAGGCCCTAGATATACTG
7-4	AGTAGATCCAAGGCGGAGTAGCTGCACGCTCAGGTTAGAATA
7-5	GAGCGTGCAGCAGTATATCTAGACTACGGCC
8-1	CACTGGTATTCTGACCGCCACTTGGCAGTTG
8-2	CGAGTGTTTAGGGCTTCTTCCAATACCAGTGCGAGGATAGTC
8-3	GTGGCGGTCAGTTTAAGTTTCT
8-4	TGTTGTCGCGACAACTGCCAAATTGGATGTCCAAATCGCTAT
8-5	GACATCCAATAGAAACTTAAAGGAAGAAGCC
9-1	ATTTATGTGGTCTGGTTATCCAACAAGGTAT
9-2	GGCCAGGCACCGTTCAACTTGCCACATAAATAGCTCCTGACT
9-3	GGATAACCAGATTGGAGACGTG
9-4	TAAATTAAGAAATACCTTGTTTGCAATATAGGACTTAGCGCC
9-5	CTATATTGCACACGTCTCCAACAAGTTGAAC
10-1	TTGGCCCATTTCGACTCTAGGTTTCTCTATT
10-2	GGGTGTTAGAAAGATCCGTGGAATGGGCCAATCCGTAAACAT
10-3	CCTAGAGTCGAATCGCAAGTTG
10-4	ACTCTAACTTTAATAGAGAAAGAAAGAACAGGGCAGCCGGAT
10-5	CTGTTCTTTCCAACTTGCGATCCACGGATCT
11-1	AACGCACGCACGTGTGCCTACTGACACAAGA

11-2	ACGAATTCAGATACCGGGAATTGCGTGCGTTAAACGAACCTC
11-3	GTAGGCACACGTAAACAGTCTG
11-4	CGACCCTCTTCTCTTGTGTCACAGGCTGCCGTATCCCGCATC
11-5	CGGCAGCCTGCAGACTGTTTAATTCCCGGTA
12-1	ACGGAAAGCCGATACGATTAGCCTGTTAATG
12-3	CTAATCGTATCCTAAGTCGCGA
12-4	GGAGCCCGGTGCATTAACAGGGCCGAGCTAGACCTAAGAGTT
12-5	TTGGATCTACTGACGTCCGTTGGCTTTCCGTTAATCTTTACC
12-5	CTAGCTCGGCTCGCGACTTAGAACGGACGTC
13-1	ATGTAATGCCTTAATGCTGGTAAACTCCCAT
13-2	TCGCGACAACACGTGAACTCGGGCATTACATTATTCTAACCT
13-3	ACCAGCATTAAACAACATTGAT
13-4	CACCACACGGGATGGGAGTTTCCTACTGCACGCACACGGGCA
13-5	GTGCAGTAGGATCAATGTTGTCGAGTTCACG
14-1	GCCAAAGGTGGGCGACGCCCTGGGTAAGATG
14-2	TTCTTAATTTAAGACGACCACCACCTTTGGCATAGCGATTTG
14-3	AGGGCGTCGCCCATTAACTCTT
14-4	AAGGTTTCGACCATCTTACCCATCACCTTACGACAGCCACAG
14-5	GTAAGGTGATAAGAGTTAATGGTGGTCGTCT
15-1	CGCAAGCGCCATGAGAAGATTTAGGCTGGGC
15-2	AAAGTTAGAGTCACCAACTTCGGCGCTTGCGGGCGCTAAGTC
15-3	AATCTTCTCATTCAATCATACG
15-4	GCCCTCACGCCGCCCAGCCTAGTGCAACGCTTCTCCCGGCTA
15-5	AGCGTTGCACCGTATGATTGAGAAGTTGGTG
16-1	ACCTATAGTGTGCGAATCGAGTACAACAGCT
16-2	CACCGGGCTCCGGCGTATTGCCACTATAGGTGATGCGGGATA
16-3	CTCGATTCGCAGGCGAACTGTA
16-4	GGACGACCAGGAGCTGTTGTAAATAGGGCACTTGGCGTTTGT
16-5	GTGCCCTATTTACAGTTCGCCGCAATACGCC
17-1	GTAGGACGGCGTTGCCTACCTTAACTGCGGG
17-2	CCCGTGTGGTGCCACGGCTAAGCCGTCCTACAACTCTTAGGT
17-3	AGGTAGGCAACATTAACTGAAT
17-4	TCCCAAAGACTCCCGCAGTTAGTCGCCCTTCTGTTTAAGCGT
17-5	GAAGGGCGACATTCAGTTAATTTAGCCGTGG
18-1	GGAGCCCTACGTTTGCTTTAATGCGAAAGGC
18-2	GTCGAAACCTTGACGGTAAAGGTAGGGCTCCTGCCCGTGTGC
18-3	TTAAAGCAAACGACTGTGGAAT
18-4	TCTATGAGGGCGCCTTTCGCACGGACGACGTTAGTCAGTAAA
18-5	ACGTCGTCCGATTCCACAGTCCTTTACCGTC
19-1	CCCTACCGCCAACTGCGCGATGTCTTGAATA
19-2	GGCGTGAGGGCTCTGTGAAGCGGCGGTAGGGCTGTGGCTGTC
19-3	ATCGCGCAGTTAGACGGCTGCG
19-4	CATTTAACATCTATTCAAGACATCGTATATCTAGTTCCAAAG
19-5	GATATACGATCGCAGCCGTCTGCTTCACAGA
20-1	CAAGAGGGAGGGAAAGACGATCGAAGCCTGA
20-2	CTGAAACAATGCGCGTATAAGCTCCCTCTTGTAGCCGGGAGA
20-3	ATCGTCTTTCCAGGCGACTTTA
20-4	ACAACGGCGCATCAGGCTTCGACCCTAATCGGGAGGTGGTTC
20-5	CGATTAGGGTTAAAGTCGCCTCTTATACGCG
21-1	ATTGGTTGTACCACGACTAATTGACACAAGA
21-2	CCTGGTCGTCCGGAAACGTAGTACAACCAATTAACAACTGCC
21-3	ATTAGTCGTGGCTCCCGGACCG

21-4	GTGGGTCTTCATCTTGTGTCAGAACACGGTGGTAGAGCGTCT
21-5	CACCGTGTTCCGGTCCGGGAGCTACGTTTCC
22-1	AATGAACGCCCACAATGTGCAGGCTTATGTA
22-2	AGTCTTTGGGAATTCTCCTAAGGCGTTCATTACAAACGCCAA
22-3	TGCACATTGTGACGACGTGTGC
22-4	GTCCTAGTCTCTACATAAGCCTTGTCCGTGGCCGCTCCGCGT
22-5	CCACGGACAAGCACACGTCGTTTAGGAGAAT
23-1	GGCTACTGAAGTAGCCTGTCCAACTATCAGT
23-2	GCCCTCATAGAGTTGACGATATTCAGTAGCCACGCTTAAACA
23-3	GGACAGGCTACACTAAGATTCC
23-4	TCAATGCGGTAACTGATAGTTTGCCACTGCCAGCTTAGTTCA
23-5	GGCAGTGGCAGGAATCTTAGTTATCGTCAAC
24-1	TTGGCGCGTTCTGGGACCGCTTAGTGCGCAG
24-2	GATGTTAAATGCCCTAAAGGAAACGCGCCAATTTACTGACTA
24-3	AGCGGTCCCAGGAACGGTTATT
24-4	GTCACGCCCTGCTGCGCACTAGTTCACGTACCGGGTGGACAA
24-5	GTACGTGAACAATAACCGTTCTCCTTTAGGG
25-1	CCTACATGACATCGGGCTCTCATATGCCCTC
25-2	TGCGCCGTTGTCCAGTCGGCAGTCATGTAGGCTTTGGAACTA
25-3	GAGAGCCCGATGGTGTGTGTCA
25-4	CTTTAACTCAAGAGGGCATATACCGAATGGACGTACACAGTG
25-5	TCCATTCGGTTGACACACACCTGCCGACTGG
26-1	GGAGCACTGAAGGAGAATACGCTGGCTGCGA
26-2	GAGACTAGGACCGGCATCAGCTCAGTGCTCCAGACGCTCTAC
26-3	CGTATTCTCCTGCCGTTGCGGA
26-4	TTTTTTTTTTTTCGCAGCCAGCTACTAAGTATTTTTTTTTTT
26-5	TACTTAGTAGTCCGCAACGGCGCTGATGCCG
27-1	CCTCCTTAGATGTTTAGGAACGATGGGCACA
27-2	TACCGCATTGAATGTGCATTCTCTAAGGAGGACGCGGAGCGG
27-3	GTTCCTAAACACTCGATAATCT
27-4	TTTTTTTTTTTTGTGCCCATCCGCCGTTATATTTTTTTTTTT
27-5	TATAACGGCGAGATTATCGAGGAATGCACAT
28-1	GGCTGACGGTCCGTGTGGACTTTAAGAATAG
28-2	CAGGGCGTGACGGGTAAGTAAACCGTCAGCCTGAACTAAGCT
28-3	AGTCCACACGGCGGGCTTGTGA
28-4	TTTTTTTTTTTTCTATTCTTAATTGGGTATGATTTTTTTTTTT
28-5	TCATACCCAATCACAAGCCCGTTACTTACCC
29-1	TCCGTAGGCATTAAAGAGGGTCCGAACCATT
29-2	TTGAGTTAAAGATGATGTTCCTGCCTACGGATTGTCCACCCG
29-3	ACCCTCTTTAATGCTATGATTA
29-4	TTTTTTTTTTTTAATGGTTCGGGCTAGGATCGTTTTTTTTTTT
29-5	CGATCCTAGCTAATCATAGCAGGAACATCAT
30-1	ATAACTGAGGCTGAAGGGCGGAGACATGTCC
30-2	GTGAGTATGTGAATGGTGTGACCTCAGTTATCACTGTGTACG
30-3	CCGCCCTTCAGAACGTCATACT
30-4	TTTTTTTTTTTTGGACATGTCTCGGAGAGGAATTTTTTTTTTT
30-5	TTCCTCTCCGAGTATGACGTTTCACACCATT
A-1	TTGCACGCGACTCGTACCTAG
A-2	CGAGAGCAAAT
A-3	TAATCGATGCGAGGTTCGTTT
A-4	GCATCGATTAATTTGCTCTCGCTAGGTACGA
B-1	GAAGAGGGTCGCGTGCTGCGC

B-2	AGGACGTACAA
B-3	AGCTACCCTCGGCAGTTGTTA
B-4	GAGGGTAGCTTTGTACGTCCTGCGCAGCACG
C-1	TGAAGACCCACCCTGGAAGGC
C-2	TCCCGTCTGAT
C-3	TAATCGGTCTTTTTTTTTTTT
C-4	AGACCGATTAATCAGACGGGAGCCTTCCAGG
A'-1	CGGAGCTAAAGGACTGTGCGGACGGTTTACT
A'-1	TTCTAACACCCAGTAAACCGT
A'-2	CCGCACAGTCC
A'-3	TTTAGCTCCGTTTTTTTTTTT
B'-1	GACAACCAGCGCTAACTTACTCATCTATTAC
B'-2	GCTGGTTGTCATCCGGCTGCC
B'-3	AGTAAGTTAGC
B'-4	CATTGTTTCAGGTAATAGATG
C'-1	TTAGGCATGTTCACCACTTGACCTATGCGTC
C'-2	ACATGCCTAAGAACCACCTCC
C'-3	TCAAGTGGTGA
C'-4	CACATACTCACGACGCATAGG

6×5 DX lattice III

1-1	GTCATTTGCCCTTATTAGTCTGCGGTGCTCAGCACCGTGGGAATGAG
1-2	TTTTTTCAGCCTAAATTACAAGGGCAAATGACTTTTTT
1-3	TACACACACATGCTGAGCACCGCAGACTAATGGGCATAAACC
1-4	CGGTCACTCATTCCCACGGGATTCTGAGACCTCACGGT
1-5	AGGTCTCAGAATCTGTGTGTGTAGGTTTATGCCCGTAATTTAGGCTG
2-1	GGCTACAGATGCGGCTTGTATCACCATAGAAGCTGATGAGTCAGGCG
2-2	TTTTTTGGTTAACACGACTCGCATCTGTAGCCTTTTTT
2-3	ACACTAAAGTAGCTTCTATGGTGATACAAGCAATGATAAACC
2-4	TTGGGACGCCTGACTCATCGATATCTGATACTCTTACC
2-5	AGTATCAGATATCACTTTAGTGTGGTTTATCATTAGTCGTGTTAACC
3-1	TTACGTTCTTTGTGCCAAGGGTCGAATGTCTATCCGCTGACGTTCGT
3-2	TTTTTTATCGTTTGGCCATACAAAGAACGTAATTTTTT
3-3	GAGCAGCGACGATAGACATTCGACCCTTGGCTAGGGATCTCG
3-4	GTATCCACGAACGTCAGCGAATGAGAGAGTAATTAATA
3-5	TTACTCTCTCATTGTCGCTGCTCCGAGATCCCTAATGGCCAAACGAT
4-1	AGTAATGACGATACTCAAACCTCATACCCTAGCAGAGGGCCATTAGA
4-2	TTTTTTAGCCACGTTAACATATCGTCATTACTTTTTTT
4-3	TACGCACCAGTGCTAGGGTATGAGGTTTGAGGCTGTTCCGTG
4-4	CACCTGTCTAATGGCCCTCGCAGGAGAAGCGAAGGGCC
4-5	TCGCTTCTCCTGCCTGGTGCGTACACGGAACAGCTGTTAACGTGGCT
5-1	TAGGAGACTTTCCAGAACCTCAACCCTATGAGACACTTTAGCTCAGA
5-2	TTTTTTAATTGGGATTCGTGGAAAGTCTCCTATTTTTT
5-3	GGGTAATCTAGTCTCATAGGGTTGAGGTTCTGTGTCGGAGGT
5-4	CTACCGTCTGAGCTAAAGTTCACTAGCAGGCCCTATCC
5-5	GGCCTGCTAGTGATAGATTACCCACCTCCGACACACGAATCCCAATT
6-1	ACGAGCCACTCCAAATGCGCGGAGCCGGGCAGTATTCCGGCATGTGA
6-2	TCCCAAAGCTTATCGTGCTTGGAGTGGCTCGTACCGTG
6-3	TAGGCATGTGTACTGCCCGGCTCCGCGCATTACCACGTTTGT
6-4	CGTTTATCACATGCCGGAATATCCTATCATCGTCGGGT
6-5	CGATGATAGGATACACATGCCTAACAAACGTGGTAGCACGATAAGCT
7-1	CGCGGCGTGACCGCACCCGCTATAAACGGATGCAAGGAAACACACAG
7-2	GGATACTAGACCGGAGAGACGGTCACGCCGCGGGTAAG
7-3	TTGAGGGTGATGCATCCGTTTATAGCGGGTGTTCCATCTAGT
7-4	GTGACGCTGTGTGTTTCCTGGATCTCCAAGAGCCCAAG
7-5	CTCTTGGAGATCCTCACCCTCAAACTAGATGGAATCTCTCCGGTCTA
8-1	TTAGCTAACCACGTTGCGCTTACGGGCGGATCTAGTCCAGCTTCGAT

8-2	CAGGTGATGTTCCATTTACCGTGGTTAGCTAATATTAA
8-3	AGGAAAGCTCTAGATCCGCCCGTAAGCGCAAGCACATGGTTG
8-4	GGGCCCATCGAAGCTGGACCCTTAAAGATATCTTTACA
8-5	GATATCTTTAAGGGAGCTTTCCTCAACCATGTGCGTAAATGGAACAT
9-1	CATGTCGGAAGTGTACGCCGACAGGGCAGAAAGCGCTGACTTGGCGG
9-2	CGGTAGTAACAGCCTCCAACACTTCCGACATGGGCCCT
9-3	TTGTAGGCCGGCTTTCTGCCCTGTCGGCGTACTAGTTGGCGG
9-4	TGTACGCCGCCAAGTCAGCCACACAGTCGAGACATCCC
9-5	TCTCGACTGTGTGCGGCCTACAACCGCCAACTAGTTGGAGGCTGTTA
10-1	AAGGGCATGCAACGGACGATCTAAAGACCCAACAGCAACTACGCCGG
10-2	TGGCTTTACCACTTTCGATGTTGCATGCCCTTGGATAG
10-3	TCGCTCGAACTGTTGGGTCTTTAGATCGTCCACGGTCCGGAC
10-4	CTTTGCCCGGCGTAGTTGCTGGGCTGGTGTTAAAGCAC
10-5	TAACACCAGCCCAGTTCGAGCGAGTCCGGACCGTATCGAAAGTGGTA
11-1	TGTGCACCCTAACGGTGTTCGACCTCCCATCTCCCTAGGGCCATGGT
11-2	TAAACGTCATACTGGCAGCGTTAGGGTGCACAGTAACT
11-3	ATAGCAGTGCGGAGATGGGAGGTCGAACACCTGAGCCGCTTC
11-4	ATTAAGACCATGGCCCTAGATCGCTAGCATATGTGCAT
11-5	ATATGCTAGCGATGCACTGCTATGAAGCGGCTCAGCTGCCAGTATGA
12-1	GGCAGGTGTAACTGGAGGCGATCTTGCGTTCGCGAGCAGAGCCCGTT
12-3	AAGAATAGAGCGCGAACGCAAGATCGCCTCCGATTATACTTA
12-4	GAACTAAACGGGCTCTGCTAAGCCAACCGTTCGCTGAT
12-5	CGTCACGGACTACGGCAGCAGTTACACCTGCCACCCGA
12-5	GAACGGTTGGCTTCTCTATTCTTTAAGTATAATCGCTGCCGTAGTCC
13-1	TCCAATGTGTCAGCGGTCCTCGCAAGCTGGCCCACAATGGGTTTATT
13-2	GGGCCCTATACAACTTCGGCTGACACATTGGACTTGGG
13-3	AGGCACTGTTTGGGCCAGCTTGCGAGGACCGATTGTCGAGTG
13-4	CACTCCAATAAACCCATTGCGCTGTCTCTGCCTGAATC
13-5	GGCAGAGACAGCGAACAGTGCCTCACTCGACAATCCGAAGTTGTATA
14-1	CCCGGCTAGGTTCAATTTGCCATGAGCCTCGTTTAAGCGAATACATA
14-2	CGTACATCGATTTACCCTGGAACCTAGCCGGGTGTAAA
14-3	ATTTCCCAAGAAACGAGGCTCATGGCAAATTCAATTAAACAG
14-4	TTCCAATATGTATTCGCTTAATTGCCCACCATAGCCAC
14-5	ATGGTGGGCAATTCTTGGGAAATCTGTTTAATTGCAGGGTAAATCGA
15-1	ATATCAGGAGTGCATAGGCAAGAGAGGCTCACTGCCCTCAGATAACA
15-2	GCAAAGGCTACTCTATTACGCACTCCTGATATGGGATG
15-3	AATCCGGTATCAGTGAGCCTCTCTTGCCTATGACAGCGTCAG
15-4	CTGTTGTGTTATCTGAGGGACTCAGTATATGAGGCTTT

15-5	TCATATACTGAGTATACCGGATTCTGACGCTGTCGTAATAGAGTAGC
16-1	CCTCCACTAACCTCTTAGCTGCTCCCTCCTCCTAGATAGGCGGGCCC
16-2	TAGTTCTAGCCATCGCCGCAGGTTAGTGGAGGATGCAC
16-3	CAAGCGCTGTTAGGAGGAGGGAGCAGCTAAGGCTAGGAATCG
16-4	TCGCCCGGGCCCGCCTATCCTTTAGAAGTTGTTATCTG
16-5	ACAACTTCTAAAGACAGCGCTTGCGATTCCTAGCGCGGCGATGGCTA
17-1	TCTTCGTTATTACTCATGTAGATTGGGCGTCGCACACGCCTATCTAA
17-2	GGAGTGCGGAACCGAGGGCGTAATAACGAAGAATCAGC
17-3	GCGAAACTAGTGCGACGCCCAATCTACATGAGCTCGGCGGCC
17-4	TCCATATTAGATAGGCGTGTAGCCTAGAGTGCCCACTT
17-5	GCACTCTAGGCTACTAGTTTCGCGGCCGCCGAGCGCCCTCGGTTCCG
18-1	TGCTGCTCAGACGGGATGGTTAGGTGTTTGATTACATCGCATAGAAG
18-2	TTGGAAGCCGGGTCAAATCCGTCTGAGCAGCAGATTCA
18-3	CAGAGGATTGTAATCAAACACCTAACCATCCTTATGAGCCCT
18-4	GGGTTCCTTCTATGCGATGTCCCTTCCAAACCAGGGCT
18-5	GGTTTGGAAGGGACAATCCTCTGAGGGCTCATAAGATTTGACCCGGC
19-1	CTCGTGGCCTCCCGCAGCCAGATGGCTCTCTCGTGTACTGCGAAAGA
19-2	CAACAGACCTAACCCTGACGGGAGGCCACGAGGTGGCT
19-3	GAAATATCCAACGAGAGAGCCATCTGGCTGCGGCTGTAAAGA
19-4	AGATCTTCTTTCGCAGTACGGTGCCTGCGAAGTGGCTA
19-5	CTTCGCAGGCACCTGGATATTTCTCTTTACAGCCGTCAGGGTTAGGT
20-1	AGGGCGCGGCGGTTACGAGACTTTCAAGTGTAACCCTCTAATCATTT
20-2	GTACGGGTCTGCGCTACCTACCGCCGCGCCCTAAAGCC
20-3	TACCGCATTGGTTACACTTGAAAGTCTCGTAGAGTAACGTAG
20-4	AGCTCGAAATGATTAGAGGCGAAATCTGCTCTAATATC
20-5	AGAGCAGATTTCGCAATGCGGTACTACGTTACTCAGGTAGCGCAGAC
21-1	TCTCACGCGGACAAAGCAATGAAAGGCACTGTATACAGCATCCGTGA
21-2	GGGCGAACTACAGGATTTATGTCCGCGTGAGATAGCAT
21-3	AGTTATAAACATACAGTGCCTTTCATTGCTTCCTGACCAACA
21-4	GGTACGTCACGGATGCTGTGGACCGCTAATAGCTATGG
21-5	CTATTAGCGGTCCGTTTATAACTTGTTGGTCAGGTAAATCCTGTAGT
22-1	CTAAAGTAGGGCGTTATGGGCCTGACAATAAAGGCATTGATATCTTC
22-2	TATGGATCGGTGTGGGCGTCGCCCTACTTTAGCAGATA
22-3	CGTACAACCGCCTTTATTGTCAGGCCCATAAACCTACTGGTA
22-4	TGCCTTGAAGATATCAATGGCCTAATTGGGCTAATAAG
22-5	AGCCCAATTAGGCCGGTTGTACGTACCAGTAGGTACGCCCACACCGA
23-1	GCCCAGGTCTAGCGAATTGGAACTCTGTGCTCTCCAACAAAGCT

	TAT
23-2	GAACCCGCACACCTTCGCGGCTAGACCTGGGCAAGTGG
23-3	TCACCCTTCCGAGAGCACAGAGTTCCAATTCCACCTCGAGGT
23-4	CATTCAATAAGCTTTGTTGGTCGAAGTAAATACTTGCG
23-5	TATTTACTTCGACGGAAGGGTGAACCTCGAGGTGCGCGAAGGTG TGC
24-1	CACATTGTCTGCAATATATTGTGTTCATCACCTGCTTGACTCTT TAC
24-2	AGATCTGGTTAGATCAAACTGCAGACAATGTGAGCCCT
24-3	GGCCATTATGCAGGTGATGAACACAATATATTTAGTTTAGCG
24-4	CTACGGGTAAAGAGTCAAGGCTCAGTCAGCCATGACTG
24-5	TGGCTGACTGAGCCATAATGGCCCGCTAAACTAAGTTTGATCTA ACC
25-1	GGAATGTCATTGCGCATGAAATTAACTCTGCTAAAGTGACGCTC TCT
25-2	CGAGCTCCTTCCCTTTCGGGCAATGACATTCCTAGCCA
25-3	CCTATTGCCCTTAGCAGAGTTAATTTCATGCTACTTGCATAA
25-4	GGCGCGAGAGAGCGTCACTTTGTTCCTGAGGGTTAGTA
25-5	CCCTCAGGAACAAGGGCAATAGGTTATGCAAGTACCGAAAGGGA AGG
26-1	GATCTAGCGGCACTGGTCGTTATCACTACGGGCCGGGCTCTTCT AAG
26-2	AAGGCATTAGCCATGACCGGTGCCGCTAGATCCCATAG
26-3	CCATTCCGGCGGCCCGTAGTGATAACGACCAAAGGCGTCCGA
26-4	TTTTTTCTTAGAAGAGCCCTCGGGACGAATGGTTTTTT
26-5	CCATTCGTCCCGAGCCGGAATGGTCGGACGCCTTCGGTCATGGC TAA
27-1	AACTTGAATCACAAGCCATTGGGCTCGACTGTTCGGAGTAGGTG CCC
27-2	TGAATGGAGACGTTCTATATGTGATTCAAGTTCTTATT
27-3	GTCAAGTGCAGAACAGTCGAGCCCAATGGCTTTCTTGATAAC
27-4	TTTTTTGGGCACCTACTCCAATCTTTGGACGTTTTTTT
27-5	ACGTCCAAAGATTTGCACTTGACGTTATCAAGAATATAGAACGT CTC
28-1	ACACGCCCGTGGAGTTTAACGTGTGAATATATCAGAGGTTCCAC CGG
28-2	CCGTAGTATATAGGGCCTCTCCACGGGCGTGTCGCAAG
28-3	ACGGTCTCTGTGATATATTCACACGTTAAACACTCCCGCGAG
28-4	TTTTTTCCGGTGGAACCTCTCACGAGAAGCACTTTTTT
28-5	GTGCTTCTCGTGACAGAGACCGTCTCGCGGGAGTGAGGCCCTAT ATA
29-1	CAGCGTGCCCAACCACCTTCCATGGTAGTAGAGTACTATTGAAC CTA
29-2	CGCGCCCGGCCGTTGTTTAGTTGGGCACGCTGCAGTCA
29-3	TCTGCGAATAACTCTACTACCATGGAAGGTGCTCCGATATAC
29-4	TTTTTTTAGGTTCAATAGTACTGGCCCGTTCCTTTTTT
29-5	GGAACGGGCCAGTTATTCGCAGAGTATATCGGAGTAAACAACGG CCG
30-1	ATAGTTCGTAAGTGACTACGCGAAATATGAGCAGATTTCTTGCC AGG
30-2	CGTTCACGGCAGCGACTGCACTTACGAACTATTACTAA
30-3	CGAGCTTCCTCTGCTCATATTTCGCGTAGTCCGGAGGCTCGG

30-4	TTTTTTCCTGGCAAGAAATGCGGGCGTGTTGGTTTTTT
30-5	CCAACACGCCCGCAGGAAGCTCGCCGAGCCTCCGGCAGTCGCTGCCG
A-1	TGACCGCGCCAATAAACTG
A-2	AGAACAATTTATCCAGGTTGG
A-3	TAGGGCCCTTTCCAGTTAC
A-4	GGAAAGGGCCCTACCAACCTGGATAAATTGTTCTCAGTTTATTGGCG
B-1	CTTAATACTTCGCCCTTCC
B-2	AGTCAATACTCGCGTATTAGC
B-3	CATCTGATGGGACATGCTA
B-4	GTCCCATCAGATGGCTAATACGCGAGTATTGACTGGAAGGGCGAAGT
C-1	CGTACCCTTCTGCATCGCG
C-2	CTGCTGAACTCAGTCAAAGGA
C-3	GAACGTTCGGCTATTTTTT
C-4	TAGCCGAACGTTCTCCTTTGACTGAGTTCAGCAGCGCGATGCAGAAG
A'-1	ACATAGCCATAACAAGTGACCCTCAATGTTGACGTATTATCTTGTGC
A'-2	GTTATGGCTATGTTTTTTT
A'-3	CGTCAACATTGAGGGTCACTT
A'-4	AAGCCAGCACAAGATAATA
B'-1	GGTGTCTGCATATTGCGTTTATGCCCACTTTCTAGTGTGCATACTCT
B'-2	ATATGCAGACACCGTGCTT
B'-3	TAGAAAGTGGGCATAAACGCA
B'-4	CCGTACAGAGTATGCACAC
C'-1	GTTAGATGATCATGGGCCCTGCCCTTACATGTTAAGCCTCTGGCCAC
C'-2	ATGATCATCTAACGATATT
C'-3	TAACATGTAAGGGCAGGGCCC
C'-4	TGAACGGTGGCCAGAGGCT

6×5 DX Lattice IV

1-1	GTAAGGCATGGGCTAAATTTGAGGTTGGACGCTCCTG
1-2	TTTTTGAGTTGAGTGCCTTACTTTTT
1-3	TTGCAGGAGTTCCAACCTCAAATTTAGCCCATCAAACACGCG
1-4	CTGAGCAGGAGCGAGCACGCACCGCG
1-5	TGCGTGCTACTCCTGCAACGCGTGTTTGACTCAACTC
2-1	GTCACGCATCCAGAGGCGTAGACCTGGCATCCGCTAT
2-2	TTTTTCATCCAGCTGCGTGACTTTTT
2-3	GGAACACCTCTGCCAGGTCTACGCCTCTGGAACTTTAACTAA
2-4	TTCCCATAGCGGAAACCGGAATCCTT
2-5	TTCCGGTTGAGGTGTTCCTTAGTTAAAGTGCTGGATG
3-1	CAAACCCAGTCTCAACTTTGGGCAGGCGGTTATTGTA
3-2	TTTTTGGAAGAGGTGGGTTTGTTTTT
3-3	CTGTTCGCAACCGCCTGCCCAAAGTTGAGACTTATGCCACTG
3-4	TGAGGTACAATAACAGGGCGGTACCA
3-5	CCGCCCTGTTGCGAACAGCAGTGGCATAACCTCTTCC
4-1	GCAGGGCCGTCATACTACCGCGCAAGGGCACCTGGAT
4-2	TTTTTGGTGTACGGGCCCTGCTTTTT
4-3	CACCACGCATGCCCTTGCGCGGTAGTATGACCCAATACTCAA
4-4	TGAGGATCCAGGTATTTAATGACTTC
4-5	CATTAAATATGCGTGGTGTTGAGTATTGGCGTACACC
5-1	GGCACTTCTGCATGTTTAACGCAACTGTTCCAAAGGC
5-2	TTTTTTGGATCACGAAGTGCCTTTTT
5-3	TATCCCAAAGAACAGTTGCGTTAAACATGCATAGATCTCGTC
5-4	TGTAGGCCTTTGGCGGTGAGGTGACA
5-5	CCTCACCGCTTTGGGATAGACGAGATCTAGTGATCCA
6-1	CCATTGTCATTGACGCGCTGAGCTTATGAATCTATTC
6-2	GGGAACGTACCGCGACAATGGCGCGG
6-3	GAGTCTCGGTTCATAAGCTCAGCGCGTCAATATTATTGTGTA
6-4	TAAACGAATAGATAGCTCAGTTCCGT
6-5	ACTGAGCTACCGAGACTCTACACAATAATGCGGTACG
7-1	CCAGAACGGAAACTGACCTGCGCTGGTGAATTTCCGG
7-2	CCTCACAGGCCCTCGTTCTGGAAGGA
7-3	GCCGGCCAAATCACCAGCGCAGGTCAGTTTCGTGGATGTCTC
7-4	CGCGGCCGGAAATGCAAGTCGCGTGC
7-5	CGACTTGCTTTGGCCGGCGAGACATCCACAGGGCCTG
8-1	CGGCTTTACCCTGGGAATACATCTCCACTTCCTTAAG
8-2	CCTCAGGTAAAGATAAAGCCGTGGTA
8-3	GGCGCAGGACAGTGGAGATGTATTCCCAGGGTACCCACACAC
8-4	AAGAACTTAAGGACATTTGAAGTACA
8-5	TTCAAATGGTCCTGCGCCGTGTGTGGGTATCTTTACC
9-1	GCCGCCAATCCTAATGGTGAAACCGTTCAGGGTGAAT
9-2	CTACAAGAATTTGTTGGCGGCGAAGT
9-3	TAGAAAGTAGTGAACGGTTTCACCATTAGGAGTAAGAGAAGC
9-4	CTAGGATTCACCCGCCCTCGGCCCAC
9-5	CCGAGGGCCTACTTTCTAGCTTCTCTTACCAAATTCT
10-1	GCGCGCCCTGGGCGTTGGATATGCGCCGGATCAGAGA
10-2	TCATAGGCATCTCGGGCGCGCTGTCA
10-3	CTACTGCGCGCCGGCGCATATCCAACGCCCAGGTTGGCGTGA
10-4	TCAAATCTCTGATGAGGGTCGTGGAA
10-5	CGACCCTCCGCGCAGTAGTCACGCCAACCGAGATGCC
11-1	AGGCAGTATAATTTACGCCTTGTAACGGCCTCCTTAC

11-2	GTTTAGTATTTGATACTGCCTGCATA
11-3	TGTTTACCGAGCCGTTACAAGGCGTAAATTATCCAGGATACC
11-4	GAGTAGTAAGGAGGGCTTTAACATAA
11-5	TTAAAGCCTCGGTAAACAGGTATCCTGGATCAAATAC
12-1	GCCACGATTCTCATGCAAAGGCGTTACGCGTCCCTCT
12-3	TTCATCCGTGGCGTAACGCCTTTGCATGAGAGAATGGCAGCG
12-4	ATGCTAGAGGGACAAGCTCGTCGTCC
12-5	CCGCGTTACACAAATCGTGGCACGGA
12-5	ACGAGCTTCACGGATGAACGCTGCCATTCTTGTGTAA
13-1	TATCATGAATTAGAGTGCGGCTTCTTCCGGTAGATCT
13-2	TTCTTCATTTAGCTCATGATAGCACG
13-3	GACCATGTCGCGGAAGAAGCCGCACTCTAATTTAACCCGCTT
13-4	TTGTCAGATCTACTCTTGCCCTAAGC
13-5	GGGCAAGACGACATGGTCAAGCGGGTTAAGCTAAATG
14-1	GGGCTCTGTAGTCCGCATAAGCGGTTCTGATAGTCCG
14-2	CCTAGAGTGTTATCAGAGCCCTGTAC
14-3	TACATCGGTCCAGAACCGCTTATGCGGACTACTATAGCCATG
14-4	AAATACGGACTATCACTTGCTACAGA
14-5	AGCAAGTGGACCGATGTACATGGCTATAGATAACACT
15-1	TCCGCAACAACTGTCGCCAGTACGAACCCTCTGACGC
15-2	TTTGAGAAGATTGGTTGCGGAGTGGG
15-3	GGGCCTCAATGGGTTCGTACTGGCGACAGTTCACACGAAAGC
15-4	GGTTAGCGTCAGAAATCTGGAAAGTC
15-5	TCCAGATTATTGAGGCCCGCTTTCGTGTGCAATCTTC
16-1	ACCCAAGCAGTTTACGCTTCAGGCGCTCTTGTTCCAT
16-2	AGCATGATGTCCGGCTTGGGTTTATG
16-3	CACACTTGGAAGAGCGCCTGAAGCGTAAACTTCCGAACCGCC
16-4	CCAGCATGGAACAGGATAACATCGAC
16-5	TGTTATCCTCCAAGTGTGGGCGGTTCGGACGGACATC
17-1	CGCTAAGGAGACGGGATTCATGTAGTGGGTTACCGTC
17-2	GACAAAGATGTGACCTTAGCGGGACG
17-3	TCACCTGATTCCCACTACATGAATCCCGTCTCGTCGCCCTAT
17-4	GGACAGACGGTAAGAATAAGATTACG
17-5	TCTTATTCAATCAGGTGAATAGGGCGACGTCACATCT
18-1	GGAGTTGCAATACACTTCTAACCGCAGATCTCCATGC
18-2	TATTTAACAGTCGGCAACTCCGCTTA
18-3	AGCGCAGCTTATCTGCGGTTAGAAGTGTATTGTTCCCTTTAT
18-4	ACGCTGCATGGAGTACCAGAAGTAGT
18-5	TTCTGGTAAAGCTGCGCTATAAAGGGAACCGACTGTT
19-1	TTCACTCCCGGTATATCCCTCGTCTTTAAGAGCCCAG
19-2	TAACCCGAAGTACGGAGTGAATCTGT
19-3	TAGATCCTCTTTAAAGACGAGGGATATACCGGAGCGTGCATG
19-4	TGGTGCTGGGCTCGTAAACAAGAACT
19-5	TTGTTTACAGAGGATCTACATGCACGCTCGTACTTCG
20-1	CCTCACTATTCAGAATTAGGACGTGATCTATCTCCCG
20-2	CACTAGTGGTTACTAGTGAGGGACTT
20-3	TGCTTGTGATAGATCACGTCCTAATTCTGAACGGGCAGTGTC
20-4	TCTAACGGGAGATCTCAAACCCTTTA
20-5	GGTTTGAGATCACAAGCAGACACTGCCCGGTAACCAC
21-1	ACCTCGCTAGACACAGTAGAAGAAAGCTCATACTGTA
21-2	GCTGGCTGCCAAGAGCGAGGTTCCCG
21-3	TTGCTGGGATGAGCTTTCTTCTACTGTGTCTTATGGTTCCGC

21-4	GCGACTACAGTATCCACCACGGAAGA
21-5	CGTGGTGGATCCCAGCAAGCGGAACCATACTTGGCAG
22-1	CGTTGACAGTTGATAACGCCATCAAGGCGGACCGGGC
22-2	TGTCCCTTTCTTATGTCAACGGTCGA
22-3	TCTGCTCTACCGCCTTGATGGCGTTATCAACTGGGCACTGTA
22-4	ATTTCGCCCGGTCCGACATAGCATAG
22-5	CTATGTCGGTAGAGCAGATACAGTGCCCATAAGAAAG
23-1	CAAAGTGATGTGATTGGAATGTACTGAGGAACGCCCG
23-2	AGCGTTTGTGCCTTCACTTTGCGTAA
23-3	ATGGGCCGCGCCTCAGTACATTCCAATCACAACCGTCAGGTC
23-4	CAGCACGGGCGTTAAGCCCTGAGGTA
23-5	CAGGGCTTCGCGGCCCATGACCTGACGGTAGGCACAA
24-1	TTATAGGGCAATAGTCGCTTACATAGTCCCTTATCAA
24-2	CACCAGTTCGTATCCCTATAAACTAC
24-3	GCTTTCCAATGGACTATGTAAGCGACTATTGACCGAAGGGTG
24-4	CGCCCTTGATAAGTTACACCGACTCT
24-5	CGGTGTAAATTGGAAAGCCACCCTTCGGTATACGAAC
25-1	TGGGTGTTGTGTGCACGTGTCCGCAGAGGCCTTGACA
25-2	TTAGACCTCTCGCAACACCCAAGTTC
25-3	ATCTCACCATCCTCTGCGGACACGTGCACACAAGACCGGCTC
25-4	CTGATTGTCAAGGAACATGTATGCCG
25-5	TACATGTTATGGTGAGATGAGCCGGTCTTGCGAGAGG
26-1	TATGTGTGTTTAGTTGTTCAATATACTGGGCTGAGGA
26-2	GAAATTATAGAGTCACACATATCTTC
26-3	GACAGCGTATCCAGTATATTGAACAACTAAAGTAAAGGGCCA
26-4	TTTTTTCCTCAGCTGTGCTAATTTTT
26-5	TTAGCACAATACGCTGTCTGGCCCTTTACACTCTATA
27-1	GTCACCACCCATCGGCCCTAAAGAACTCTCCGAAGGA
27-2	TGCTGGTCGCACCGTGGTGACCTATG
27-3	CCACGTTCTGAGAGTTCTTTAGGGCCGATGGGCGTAAGATGC
27-4	TTTTTTCCTTCGGAACTCTTTTTTTT
27-5	AAAGAGTTCAGAACGTGGGCATCTTACGCGGTGCGAC
28-1	CCGGTGTTCACGCTGCGCACATCATTCAGTCATCGCA
28-2	GGGCGGATACACGAACACCGGTACCT
28-3	TACCTTAAACCTGAATGATGTGCGCAGCGTGGGCGCCACAAC
28-4	TTTTTTGCGATGAAGGAACTGTTTTT
28-5	CAGTTCCTGTTTAAGGTAGTTGTGGCGCCCGTGTATC
29-1	CCCATCATTTGTAATCTAGGGCGTGAGCACAAAGACA
29-2	ATCAGCTTCCACCATGATGGGAGAGT
29-3	GGCTTGGAATTGCTCACGCCCTAGATTACAACTCGGATAAAC
29-4	TTTTTTGTCTTTGAACTTTGCTTTTT
29-5	GCAAAGTTATTCCAAGCCGTTTATCCGAGGGTGGAAG
30-1	AGGAACCCGAGTCAGACGAACAACGCCGCACCCGTAC
30-2	TCCTGCACGACCTGGGTTCCTCGGCA
30-3	GAATTCTGGTGCGGCGTTGTTCGTCTGACTCTTGTGGGACGA
30-4	TTTTTGTACGGGTTCTCCACGTTTTT
30-5	CGTGGAGAACCAGAATTCTCGTCCCACAAAGGTCGTG
A-1	CTCAGGGTTGTTA
A-2	GTTGATTAGCTACGTGGTAAC
A-3	CTGTCTAGTATGC
A-4	CTAGACAGGTTACCACGTAGCTAATCAACTAACAACC
B-1	TACTCAACGTGAC

B-2	AACTGATCTCCTCACAAGGAT
B-3	ACATCGAGCGGGA
B-4	CTCGATGTATCCTTGTGAGGAGATCAGTTGTCACGTT
C-1	GTCGCAGTTCGAA
C-2	GCGGATTCAGTGGGCTGCAAT
C-3	AAATTACGTTTTT
C-4	CGTAATTTATTGCAGCCCACTGAATCCGCTTCGAACT
A'-1	CCGTTCATCATCGCGCACGGAACCGGGACAGATACTA
A'-2	TTTTTCGGACACC
A'-3	GTCCCGGTTCCGTGCGCGATG
A'-4	TATGATAGTATCT
B'-1	TACGATCGGTCGGAAGACTCAGTAGGGCGGGTCGCCA
B'-2	CGATCGTATTCCA
B'-3	CGCCCTACTGAGTCTTCCGAC
B'-4	TAGTGTGGCGACC
C'-1	TTCCCTCGCCTCACTCAGTGACTCCGAACTTCAAACC
C'-2	CGAGGGAATAAAG
C'-3	GTTCGGAGTCACTGAGTGAGG
C'-4	CAGGAGGTTTGAA

9×10 DX Lattice

1-1	GGCGCGTCAGGAGCCTTAGGGCTGTTCGACATCACGCACTCTT
1-2	TTTTTTTTTTCAGTCGGCTGCCCTGACGCGCCTTTTTTTTTT
1-3	GCATTCTATCATGTCGAACAGCCCTAAGGCTCAATGCAGGTA
1-4	ATCCTTACCCAAGAGTGCGTGACAAGGTGCTCTACACTCGGT
1-5	GAGCACCTTGTGATAGAATGCTACCTGCATTGGCAGCCGACTG
2-1	GTTCGGCCGACACACCCGACACTAGGGCGATAAGCTAGTAATG
2-2	TTTTTTTTTTGCCCGACCGTCGTCGGCCGAACTTTTTTTTTT
2-3	CTAAGGGCCTTATCGCCCTAGTGTCGGGTGTTAGACATGTAT
2-4	ATAACTTGGACATTACTAGCTTGGGCCTGTGCATAATGTTAC
2-5	GCACAGGCCCAAGGCCCTTAGATACATGTCTAGACGGTCGGGC
3-1	GTGCATAAACTTTAACCGTCTGATGTTTCGTGTTGCGGTAGAC
3-2	TTTTTTTTTTTCCTTCACTGCAGTTTATGCACTTTTTTTTTT
3-3	GTTTAACCGCCACGAAACATCAGACGGTTAAGGGTCCCTAGC
3-4	CGCACCATTGGTCTACCGCAACCACGGCTAAGTCATGTGGCA
3-5	CTTAGCCGTGGGCGGTTAAACGCTAGGGACCCGCAGTGAAGGA
4-1	AGCGTTGAGTGCCATATCGATCAGAGAGCTATCCCTCGCCATG
4-2	TTTTTTTTTTAACCAATGTTACACTCAACGCTTTTTTTTTTT
4-3	ATCGCGGGTAATAGCTCTCTGATCGATATGGCGTCGTTGCGA
4-4	ACTGGCCGTACATGGCGAGGGATGGTTAAGCACAAATGGAAG
4-5	TGCTTAACCATTACCCGCGATTCGCAACGACGTAACATTGGTT
5-1	CTTTGGTCGCCTAGACAAGAGTAAAGAAGTCTTCTAGACGAGG
5-2	TTTTTTTTTTTTTCTTAGGAGAGGCGACCAAAGTTTTTTTTTT
5-3	AACGAAAGTTAGACTTCTTTACTCTTGTCTAAAGCCGCTTAC
5-4	CCAACCACCACCTCGTCTAGAAGACACTTTAAGGAGGGTAAC
5-5	TTAAAGTGTCTAACTTTCGTTGTAAGCGGCTTTCTCCTAAGAA
6-1	TCTCGAGCGGTGGGAATCCCTTCAAACAGATACCCAGTCGCGT
6-2	TTTTTTTTTTTTTTAAATATCAACCGCTCGAGATTTTTTTTTT
6-3	CCACCTACAGTATCTGTTTGAAGGGATTCCCGATCGGGTGAG
6-4	AGTTCGTGTTACGCGACTGGGCGCCAGTTGCCTACTACCCGG
6-5	GGCAACTGGCGCTGTAGGTGGCTCACCCGATCTGATATTTAAA
7-1	GGGCCTAGCAGCAGTAGCCAGGCAAACACATCGCTTCAACTAT
7-2	TTTTTTTTTTGATGCTATCCGCTGCTAGGCCCTTTTTTTTTT
7-3	ACCGGACCCGGATGTGTTTGCCTGGCTACTGATGTATTTAGT
7-4	GCCAGCATCCATAGTTGAAGCATTGGTTTATGTCACCGAGGC
7-5	CATAAACCAATCGGGTCCGGTACTAAATACATCGGATAGCATC
8-1	CCCAATCGGCACGACTGCGTATCAGACTGCTCGGGAAGACTCA
8-2	TTTTTTTTTTTGTTGGCGAGATGCCGATTGGGTTTTTTTTTT
8-3	TGGACTCTGGGAGCAGTCTGATACGCAGTCGGGTGGTTGACG
8-4	CGGAAGATTGTGAGTCTTCCCATTCAGGGATGATACCCTCGT
8-5	CATCCCTGAATCCAGAGTCCACGTCAACCACCTCTCGCCAACA
9-1	AACATCTCTGGCGTGCGCGCAGTTACAAGGTGGATACCTTGCT
9-2	TTTTTTTTTTTTGTTGAGGCTCCAGAGATGTTTTTTTTTTTT
9-3	CAGAACGTACCACCTTGTAACTGCGCGCACGCATCAATAGAC
9-4	CGATTGTGGAAGCAAGGTATCGGCCTCTCCCAGAAAGGCTAC
9-5	TGGGAGAGGCCGTACGTTCTGGTCTATTGATGAGCCTCAACAA
10-1	AACAGACGCGGTAACACTATGATGGCGTATATTTGTCAATACA
10-2	TTTTTTTTTTACCAAAGTGAGCCGCGTCTGTTTTTTTTTTTT
10-3	ACCAAAGAACATATACGCCATCATAGTGTTACCATGAAGCGC

10-4	CGTACTCAATTGTATTGACAAGGCACCGCTCCGTAACTAACC
10-5	GGAGCGGTGCCGTTCTTTGGTGCGCTTCATGGCTCACTTTGGT
11-1	CTCCTGAGCGCAAGACCCAAAGAGATCTAGAAGTGTTGACTAT
11-2	TCCAAGTTATATTGCAGTTCTGCGCTCAGGAGACCGAGTGTA
11-3	AGTTTAGCATTTCTAGATCTCTTTGGGTCTTATTCGTGACGT
11-4	AACGCGGGCGATAGTCAACACCCGTCAAGCTGTGGCGGGAAG
11-5	CAGCTTGACGGATGCTAAACTACGTCACGAATAGAACTGCAAT
12-1	TTACTATCTTCACACGTGCGCAACTCAGACACGGAGTTCTTGT
12-2	CAATGGTGCGAATTCAGGGCGGAAGATAGTAAGTAACATTAT
12-3	TGCCGTCACAGTGTCTGAGTTGCGCACGTGTCATCAAGGACA
12-4	AAATGGAGATACAAGAACTCCGATATCAATTATCGGATACAT
12-5	TAATTGATATCTGTGACGGCATGTCCTTGATGCGCCCTGAATT
13-1	ATACGACTCTACTCTTTCTATGACTATGATATGGGATTCATGA
13-2	TACGGCCAGTCGCAGCAATCTTAGAGTCGTATTGCCACATGA
13-3	CAGAGCATGCATATCATAGTCATAGAAAGAGTCAAGAACTAT
13-4	GGTAGTTACCTCATGAATCCCGCATAACCGTGACGTACTAGG
13-5	CACGGTTATGCGCATGCTCTGATAGTTCTTGAAGATTGCTGCG
14-1	CGGAGTCTCTGCCGGGCCTGCGTGTTTAGTGACAATGCCGCCA
14-2	TGGTGGTTGGTCTGCTCTTCGCAGAGACTCCGCTTCCATTTG
14-3	GGTGCGTCCCTCACTAAACACGCAGGCCCGGCATTGCATGAT
14-4	ATCCGCCGGTTGGCGGCATTGTCAACAGGGTCTTAATACGCC
14-5	GACCCTGTTGAGGGACGCACCATCATGCAATGCGAAGAGCAGA
15-1	TCAACTGAGGTAACACGGCGGATATGACTCACATAACCGATTA
15-2	AACACGAACTTCCGAGTCGGTACCTCAGTTGAGTTACCCTCC
15-3	AATCAATGTCGTGAGTCATATCCGCCGTGTTAGTTTGCTACA
15-4	TAACATGTCATAATCGGTTATAGAGCAAAGCACTCGTAGATT
15-5	TGCTTTGCTCTGACATTGATTTGTAGCAAACTACCGACTCGGA
16-1	GTGAAAGATAAACCCGCTGTGGTACATCTGGGCCCAACGGGTT
16-2	GGATGCTGGCGTAGGCGGAGCTTATCTTTCACCCGGGTAGTA
16-3	CCGGAGACATCCCAGATGTACCACAGCGGGTTGAGCCGACCG
16-4	AATTTACTACAACCCGTTGGGTATAAGGCGGGAAATCAGATG
16-5	CCCGCCTTATAATGTCTCCGGCGGTCGGCTCAGCTCCGCCTAC
17-1	GCACAGACACTGAGGACCGAGTCCACACCGGGCTTGTCTCTTG
17-2	CAATCTTCCGGAAGCTGCACAAGTGTCTGTGCGCCTCGGTGA
17-3	TAACTTAGTACCCGGTGTGGACTCGGTCCTCAGCTCGCACTG
17-4	CGGCCGATCCCAAGAGACAAGTTCTCTAGTCGGAGCTTGCTG
17-5	CGACTAGAGAATACTAAGTTACAGTGCGAGCTTGTGCAGCTTC
18-1	GACGGATAGGAGCTTAATAGCACGATGCCGAATCTCAAGCGGT
18-2	TCCACAATCGGCGGTTGGCAATCCTATCCGTCACGAGGGTAT
18-3	GGGTGGGATATTCGGCATCGTGCTATTAAGCTTTAATGTGCC
18-4	TAGACTCCTAACCGCTTGAGATCCACATTGTAGTGATCCTTA
18-5	TACAATGTGGATATCCCACCCGGCACATTAAATTGCCAACCGC
19-1	TAACAGAACGTGCCAACCTAAACGCTTACTCCTGTCCGGGACT
19-2	ATTGAGTACGAAACTAATAGAACGTTCTGTTAGTAGCCTTTC
19-3	ATACCTAACAGGAGTAAGCGTTTAGGTTGGCGCCGTTGATCT
19-4	GTAGGAGTGGAGTCCCGGACACGCGCACCTATTGTGCCCTCT
19-5	ATAGGTGCGCGTGTTAGGTATAGATCAACGGCTCTATTAGTTT
20-1	TGACCTTTATATTACATCTTTGTAGTCCGACTTGAGACCCAAG
20-2	TCCGGGCTCAAGACTTGGAGATATAAAGGTCAGGTTAGTTAC

20-3	CGAGGTCTGAAGTCGGACTACAAAGATGTAAGCGAGTGTCAA
20-4	CCATAATCTGCTTGGGTCTCAGGAGCTTCTAGGGATTCTCGG
20-5	CTAGAAGCTCCTCAGACCTCGTTGACACTCGCTCTCCAAGTCT
21-1	TTAGGTCGGGCTGCAACGTTTACAGCCAAGGACCCAGTTCTTG
21-2	CGCCCGCGTTGCACTTCAACGGCCCGACCTAAGTTAAACTCT
21-3	TGGTAGGATATCCTTGGCTGTAAACGTTGCATAAATCCACAA
21-4	GTTAAGAGGCCAAGAACTGGGCCACCCTCGTTAGTAAATCGT
21-5	AACGAGGGTGGTATCCTACCATTGTGGATTTACGTTGAAGTGC
22-1	TCTGGACATACTGCACTGGATTATATTAGCATCGCCTGCCAAC
22-2	ATCTCCATTTCAGCAAGGAACGTATGTCCAGACTTCCCGCCA
22-3	CGTTGGGCTTATGCTAATATAATCCAGTGCAAGATGGCAATT
22-4	GGACCCTTCTGTTGGCAGGCGTCTCATATAAAGACTATCGTG
22-5	TTTATATGAGAAAGCCCAACGAATTGCCATCTGTTCCTTGCTG
23-1	TCATATAGTGCTGCGCGCTGCCTGATCGCAACAACTAACGTAG
23-2	GGTAACTACCCACGCCTGGCTGCACTATATGAATGTATCCGA
23-3	CATACATCTTGTTGCGATCAGGCAGCGCGCACTAATCATGGG
23-4	TAGAGTCCAGCTACGTTAGTTAATCCGTAGTACCTAGAAACG
23-5	TACTACGGATTAAGATGTATGCCCATGATTAGAGCCAGGCGTG
24-1	TCCTCCAGTACTTATATGGTCCAATTGCATGCGATTCCTTCAC
24-2	ACCGGCGGATTCCCTAATTACGTACTGGAGGACCTAGTACGT
24-3	AAAGGTCGATGCATGCAATTGGACCATATAATGCTGTTCATG
24-4	AGTAGGCATTGTGAAGGAATCCCGTACGAGGGTCCTAGATGC
24-5	CCCTCGTACGGATCGACCTTTCATGAACAGCAGTAATTAGGGA
25-1	GAGGGCACCCGACGGCCGGATCGATTGGGTGCAGATAAGACAC
25-2	TGACATGTTACCAAACGCGCCCGGGTGCCCTCGGCGTATTAA
25-3	TTGCGGAATTGCACCCAATCGATCCGGCCGTGTCGTACTACA
25-4	GAAAGGTGACGTGTCTTATCTTCCAACGATGTATACCCGTAT
25-5	ACATCGTTGGAAATTCCGCAATGTAGTACGACGGCGCGTTTGG
26-1	ACTCGGGAGAAGGGAAGGGCCGACCAATAAAGACAATGCTGTA
26-2	GTAGTAAATTAGCTACTTCCGTTCTCCCGAGTAATCTACGAG
26-3	ATGACCCAGGCTTTATTGGTCGGCCCTTCCCGGCAGCTATTA
26-4	GTAAATCTCTTACAGCATTGTCCCGCTCTCCTGTCGTAGGCT
26-5	AGGAGAGCGGGCCTGGGTCATTAATAGCTGCCCGGAAGTAGCT
27-1	AGGTGCTCGCCTATTGCTGACAACTTTAGCTTGTCCCATCTTG
27-2	GGATCGGCCGATTCGAGTTTAGGCGAGCACCTCATCTGATTT
27-3	ACCGCCCTACAAGCTAAAGTTGTCAGCAATAGCCAGTCTTCC
27-4	CGCGCCCTCTCAAGATGGGACTGTTTGAGGCCCACACCTTGC
27-5	GGCCTCAAACAGTAGGGCGGTGGAAGACTGGCTAAACTCGAAT
28-1	TTATGACGCCTGGTGCTCGGCAGCTGGACAGGAATGTTTCACT
28-2	TAGGAGTCTACTAACGGCGCTAGGCGTCATAACAGCAAGCTC
28-3	ATATAATGTTCCTGTCCAGCTGCCGAGCACCAACTGGCCGGC
28-4	GCCTAGACGAAGTGAAACATTTATTCGCAGTGTCAGAATGGT
28-5	CACTGCGAATAAACATTATATGCCGGCCAGTTAGCGCCGTTAG
29-1	ACCCAGCTGCGTTCAGAATCAACGGTGTATAACGTAGTCCTTG
29-2	CCACTCCTACAGCCGCTTGACCGCAGCTGGGTTAAGGATCAC
29-3	CGACGAGAATTTATACACCGTTGATTCTGAATTTGTTGTACT
29-4	GCTGACCTGACAAGGACTACGCACGCTGCCCTATCCTGTCCC
29-5	AGGGCAGCGTGATTCTCGTCGAGTACAACAAAGTCAAGCGGCT
30-1	GTTCGCTATTTAACGCTCGTCTTCAGAAATATCCCTCACGTCA

30-2	CAGATTATGGTAATCGGTCTGAAATAGCGAACAGAGGGCACA
30-3	TACGCTATAGATATTTCTGAAGACGAGCGTTACAAGCTGCAA
30-4	CGCACCCTAATGACGTGAGGGCAAATGCGGTAGGGAGGGAAC
30-5	TACCGCATTTGCTATAGCGTATTGCAGCTTGTCAGACCGATTA
31-1	AAGGCCCGCACTGCCGCCAGTTAATCGCCAGGAATGGACCAGA
31-2	AGAAGGGTCCACTAACTGCCTGTGCGGGCCTTACGATTTACT
31-3	GTTATCCCTCCCTGGCGATTAACTGGCGGCAACACAGGGCCT
31-4	ACTCATACACTCTGGTCCATTGGGTTGCATACCAGATAGCCG
31-5	GTATGCAACCCGAGGGATAACAGGCCCTGTGTAGGCAGTTAGT
32-1	GCTCTGAGAATCGTGCATCTAAGCTCTGTAGGGTCGCTGCATT
32-2	CTGGACTCTACCCTTGGGTCAATTCTCAGAGCCACGATAGTC
32-3	AGCTTACCACCCTACAGAGCTTAGATGCACGTACCATTGAAG
32-4	GTTCCCTCGGAATGCAGCGACTCCCTAGTATGGGAGCGTCTG
32-5	CATACTAGGGAGTGGTAAGCTCTTCAATGGTATGACCCAAGGG
33-1	TACGATACCCTGTAATAACCCTAGAAATAATCCCTATCGACTG
33-2	AATGCCTACTTATAGTCAAAGAGGGTATCGTACGTTTCTAGG
33-3	GGTATCTATAGATTATTTCTAGGGTTATTACTAGTGCTGTGT
33-4	CAGAAAGTACCAGTCGATAGGTATCCGGCTATGACACATAAT
33-5	ATAGCCGGATATATAGATACCACACAGCACTACTTTGACTATA
34-1	ATGGGCACCAGAGCAGGACGATGCGAACACGCGCTTTAATCTG
34-2	GTCACCTTTCGTTAGATGATTCTGGTGCCCATGCATCTAGGA
34-3	CTTATCAATCGCGTGTTCGCATCGTCCTGCTTCGAAATTCGC
34-4	CAAGTCCGCTCAGATTAAAGCCAAAGTCGCGGGCTCTCCCAA
34-5	CCGCGACTTTGGATTGATAAGGCGAATTTCGAAATCATCTAAC
35-1	TTACCCATTCAACAGTTTCAAGGACTGTTGTTTAGCCGCAGCA
35-2	AGAGATTTACCGGCGGGCAGCTGAATGGGTAAATACGGGTAT
35-3	TGTTATTCTAAACAACAGTCCTTGAAACTGTGCCGCTAAAGC
35-4	GAATCGACCCTGCTGCGGCTATTTGGCACACCAACGCTCGCT
35-5	GGTGTGCCAAATAGAATAACAGCTTTAGCGGCGCTGCCCGCCG
36-1	GTGATAGCGTTACTGGACGATGGGCTCGTCGGCAGTTATCAGC
36-2	AGAGGGCGCGAGTCATAAGCGAACGCTATCACAGCCTACGAC
36-3	TTAGTTTATACCGACGAGCCCATCGTCCAGTCGAAAGCGGCC
36-4	AAAGATAATTGCTGATAACTGTTTGTCTCTCAGTACCCTTGA
36-5	TGAGAGACAAATATAAACTAAGGCCGCTTTCGCGCTTATGACT
37-1	CATGGCCGTGGTCTTTCGTAGGGTAGGTCTAATACAGATCGTC
37-2	TCGTCTAGGCGGGCTGATATGCCACGGCCATGGCAAGGTGTG
37-3	ATGGCGCTCTTTAGACCTACCCTACGAAAGATGCTTTATCTA
37-4	TTTGCACAATGACGATCTGTATCCGTGGTTCACGGCTTGTAT
37-5	TGAACCACGGAAGAGCGCCATTAGATAAAGCACATATCAGCCC
38-1	GTTGGGCGCGACACTTGAATAATCACCGTTGCCTCGAGCGTGA
38-2	TCAGGTCAGCACGAGACGGCATCGCGCCCAACACCATTCTGA
38-3	GCCCTATCTTGCAACGGTGATTATTCAAGTGAGTCAGATATT
38-4	GAGCTCCAATTCACGCTCGAGGTGTTGTGAGAATCAGTCATG
38-5	TCTCACAACACAAGATAGGGCAATATCTGACTTGCCGTCTCGT
39-1	GGCACCCTTGGCCAAACTTGCGATGCAAATTCGCATCTGCCTG
39-2	TTAGGGTGCGACTTTCGTACGCCAAGGGTGCCGGGACAGGAT
39-3	CTACGCTCCAGAATTTGCATCGCAAGTTTGGTCTCAAGGGTT
39-4	GGGTGACAAGCAGGCAGATGCTAAGATAGTGATCTGCGTTGG
39-5	TCACTATCTTATGGAGCGTAGAACCCTTGAGACGTACGAAAGT

40-1	CCTGTACTTAGTGCACCGGCCTTCCTCCATGTGGGCTGGTGTC
40-2	ACAGAAGATCACCCAAGGTAGCTAAGTACAGGGTTCCCTCCC
40-3	AGGTCCGGTGACATGGAGGAAGGCCGGTGCACTGTGGGTCCT
40-4	TTTGTGGACGGACACCAGCCCTAGTCCTGCCCTTTCATTGAA
40-5	GGGCAGGACTACACCGGACCTAGGACCCACAGCTACCTTGGGT
41-1	AACTAGAATCCGGGTGCTATCCTCCGAATGGATGATATGATCC
41-2	GTGTATGAGTAATTAACCAGCGGATTCTAGTTGTTGGGTCAG
41-3	GTTTCCATATTCCATTCGGAGGATAGCACCCTGTTCCCTTTA
41-4	GCGTAAACTTGGATCATATCAAGACGCATTACCTCGCATGCC
41-5	GTAATGCGTCTATATGGAAACTAAAGGGAACAGCTGGTTAATT
42-1	TATCGTGATTGCGCAGCGAAATGCGTCACACTGCCGGGATTCT
42-2	CCGAGGGAACGCCTTAGCGACCAATCACGATACGGCTATCTG
42-3	TAGGTTGGTCAGTGTGACGCATTTCGCTGCGTTGTACGATTC
42-4	CTAAGCGGCAAGAATCCCGGCACTGACCCTAGTCTCCGCTTG
42-5	CTAGGGTCAGTGACCAACCTAGAATCGTACAAGTCGCTAAGGC
43-1	CATAGGCATATAGAATGTCTGTAGCATATGGATTTGTCTTTGA
43-2	GTACTTTCTGTAACGGCAACTATATGCCTATGCAGACGCTCC
43-3	ACAGACACAGTCCATATGCTACAGACATTCTACGACGAACGG
43-4	TGTATGGCCATCAAAGACAAAGTCTAAGGGACAGCGTCGAGC
43-5	GTCCCTTAGACCTGTGTCTGTCCGTTCGTCGTAGTTGCCGTTA
44-1	ACAACTTATAGGGCCCTCATTATAACGTTTAACCCTCCAATAG
44-2	AGCGGACTTGAACATCAGCGGCTATAAGTTGTATTATGTGTC
44-3	TGAACCACTGTTAAACGTTATAATGAGGGCCACGAGTGGTTA
44-4	CCACCTGTCCCTATTGGAGGGCAGTCGTTCAAGTTAATGATC
44-5	TTGAACGACTGCAGTGGTTCATAACCACTCGTCCGCTGATGTT
45-1	ATCTCGAGGGCCTCCTTAGTCACCACGACCAACGGCTAGTCAC
45-2	GGGTCGATTCACGGGCTTAACGCCCTCGAGATTTGGGAGAGC
45-3	CTCACAACGGTTGGTCGTGGTGACTAAGGAGTCTTTCACTGC
45-4	GAGCGGTATTGTGACTAGCCGGCCGCACTGTCGAGGACCACT
45-5	GACAGTGCGGCCCGTTGTGAGGCAGTGAAAGAGTTAAGCCCGT
46-1	TATTGTTACACATTGTGTGCCTGCCATTGGTAGTACGCATAGT
46-2	AATTATCTTTATGAGGTATGCGTGTAACAATAAGCGAGCGTT
46-3	CTAGAAAGCCTACCAATGGCAGGCACACAATTTACATAGGAC
46-4	GTATACGCTCACTATGCGTACTCGTAGGCGACGAGGGTTGGG
46-5	GTCGCCTACGAGGCTTTCTAGGTCCTATGTAAGCATACCTCAT
47-1	ATACACCCAAGCGACATTCTGTAAAGTCTCGGACGCGTCAAAC
47-2	ATTGTGCAAATATCTGCTAAGCTTGGGTGTATTCAAGGGTAC
47-3	ACCGCCGTGACCGAGACTTTACAGAATGTCGAAGATGTACTG
47-4	TCCACTCCCAGTTTGACGCGTCGTGGCTCAGGGACTCCTAGA
47-5	CCTGAGCCACGTCACGGCGGTCAGTACATCTTCTTAGCAGATA
48-1	ATAGTACCCTACTCTGCATCCTGGGCGCTAATTGGAGATCATA
48-2	ATTGGAGCTCAAGCAGGATAGTAGGGTACTATATACAAGCCG
48-3	AAGCAGGAACATTAGCGCCCAGGATGCAGAGCGGCAACGTGA
48-4	AACGGTATATTATGATCTCCATACTACCAGTCCCACATGCCT
48-5	GACTGGTAGTAGTTCCTGCTTTCACGTTGCCGCTATCCTGCTT
49-1	TCACGATAACTCGGCATATGAACGTTAAGAAACTAGACGGAAT
49-2	CTTGTCACCCATCAACCGATCAGTTATCGTGACATGACTGAT
49-3	CATGGTCTCGTTTCTTAACGTTCATATGCCGCGGTATGCGAC
49-4	AGTCAGTCAAATTCCGTCTAGGATTCATCTTCTGGAATCAGT

49-5	GAAGATGAATCCGAGACCATGGTCGCATACCGGATCGGTTGAT
50-1	CTTCGTACTTCGGGTCTTCATTCCAATTGTCTAACAAGTCTCC
50-2	CGTCCACAAACCTTACAAACGGAAGTACGAAGCCAACGCAGA
50-3	GATGGGCATTAGACAATTGGAATGAAGACCCAGCGCGGATAA
50-4	ATACAACAAGGGAGACTTGTTTATTGTGGTGGATTCACACCT
50-5	CCACCACAATAAATGCCCATCTTATCCGCGCTCGTTTGTAAGG
51-1	ATGGGCAATGATTCTTTCTTAGCGCCATGCAATCACACACACA
51-2	TGCCGCTTAGACTCAGCAGCTTCATTGCCCATGGCATGCGAG
51-3	GCGTCATGTATTGCATGGCGCTAAGAAAGAAGCGTAAGCACT
51-4	TCCTAATAAATGTGTGTGTGATTGGTGACTCATGTTCTAATT
51-5	TGAGTCACCAATACATGACGCAGTGCTTACGCAGCTGCTGAGT
52-1	ATTCTTGTCGCCGACTGTCAAACATCACCCGTACCCTTAATAA
52-2	TGGCCATACAATTGGTCGAAGGCGACAAGAATCAAGCGGAGA
52-3	TAACCGCAGCACGGGTGATGTTTGACAGTCGATTTAATCGCT
52-4	CTGTACCAGTTTATTAAGGGTGGCGCATTACTACCAACGAGC
52-5	AGTAATGCGCCGCTGCGGTTAAGCGATTAAATCTTCGACCAAT
53-1	TCTCCCTCCGACGCGAAAGAAACAACTACAAGTCCCAATACTA
53-2	GGACAGGTGGTTCCTCATCGCTCGGAGGGAGAGCTCGACGCT
53-3	CAAGAGTGTGCTTGTAGTTGTTTCTTTCGCGTTACTATGTCC
53-4	GTAGGTCAGATAGTATTGGGACCCGTGTGTGTCAGTCGCCTG
53-5	ACACACACGGGCACACTCTTGGGACATAGTAAGCGATGAGGAA
54-1	CTAAAGTTTCTAGTGAGTTTCGGAGTGTTAGAAGCGCCTACGG
54-2	AATACCGCTCATCTTGGCTGCAGAAACTTTAGGATCATTAAC
54-3	GAGCTTGAAGTCTAACACTCCGAAACTCACTTGTTACTGCCG
54-4	GGCACTCTATCCGTAGGCGCTAACGCATCGTAGTTAAATTAT
54-5	TACGATGCGTTCTTCAAGCTCCGGCAGTAACAGCAGCCAAGAT
55-1	ACTATAACGGGAGAGCAGCCCGGGACAAACTAAGTAGTCGCCT
55-2	GAGCGTATACAGCTATACTCTCCCGTTATAGTAGTGGTCCTC
55-3	TCGGAGCTGGTAGTTTGTCCCGGGCTGCTCTTATGATTGGGT
55-4	GGCACGGACGAGGCGACTACTGATAGAAGTGCAGCCCTATAT
55-5	GCACTTCTATCCCAGCTCCGAACCCAATCATAAGAGTATAGCT
56-1	CGGAGCGGACACTTACTAGCCTACGGGCGTTCCCTGTATATTC
56-2	TGGGAGTGGAAGCCGCCATTATGTCCGCTCCGCCCAACCCTC
56-3	TTTATGAGCTGAACGCCCGTAGGCTAGTAAGCTGATTCGGAG
56-4	CTTCGTTGTCGAATATACAGGGAGACGGAGGGCTGGTTATTG
56-5	CCCTCCGTCTCAGCTCATAAACTCCGAATCAGTAATGGCGGCT
57-1	CTAGGTTCAGTAGGAAAGGGCGGTACCCTATTAGATGCTTAGT
57-2	ATATACCGTTGCGCCTAATAGACTGAACCTAGTCTAGGAGTC
57-3	ACGCTAACTAAATAGGGTACCGCCCTTTCCTTACCGCTTATT
57-4	AACAACTTAGACTAAGCATCTTACTCCGACCAGCTTGCACCT
57-5	TGGTCGGAGTATAGTTAGCGTAATAAGCGGTACTATTAGGCGC
58-1	ATCGTTTATAAAGGCGCTCTACCCAGTGCTTCAAAGTACATAG
58-2	TTGACTGACTGACAGGAAACCTTATAAACGATAGGCATGTGG
58-3	ACTGATGATGGAAGCACTGGGTAGAGCGCCTATAGAGGATCT
58-4	TATAGGCGGCCTATGTACTTTGTTATAACTTCGGCCAAGAGA
58-5	GAAGTTATAACCATCATCAGTAGATCCTCTATGGTTTCCTGTC
59-1	TTAGGTAGAGGTACCCTCTGTAGCTAGGTACCCAGTTTAACAC
59-2	CTTGTTGTATGGTGTCTACTACCTCTACCTAAACTGATTCCA
59-3	CAAAGTTTGAGGTACCTAGCTACAGAGGGTAGCGTCGCTAAT

59-4	TTATAAATAAGTGTTAAACTGCGGCCTGACGTGATTGGAGAC
59-5	ACGTCAGGCCGTCAAACTTTGATTAGCGACGCTAGTAGACACC
60-1	GGTAGCTCACAGCGTCTTCCAATCGGTTGTAGGGCGTATTCAT
60-2	ACCGGATGAACGGCACAGCAGTGTGAGCTACCAGGTGTGAAT
60-3	AGAGTAGTGGCTACAACCGATTGGAAGACGCTGGCAGGCCGA
60-4	GCCTTTCTTAATGAATACGCCACAATACTACCGATAAGATAT
60-5	GGTAGTATTGTCCACTACTCTTCGGCCTGCCACTGCTGTGCCG
61-1	CTGGTGAGATGCGACCGTGAAGAGCCTACCGAAACTTGCACCC
61-2	TTTATTAGGAATGGGCCCTTACATCTCACCAGTAGGTTCTTC
61-3	GGACGCCAGGTCGGTAGGCTCTTCACGGTCGCGTGTGGTTTA
61-4	GTTTCATGGTGGGTGCAAGTTACGTAGGGATCATTTAGGGAC
61-5	GATCCCTACGTCCTGGCGTCCTAAACCACACGTAAGGGCCCAT
62-1	TGACCTGCCGCTCATATATGGTGAACTCACCGCCTACCGGACA
62-2	ACTGGTACAGTCGACCGCCTAGCGGCAGGTCAAATTAGAACA
62-3	ACGGAGGATCCGGTGAGTTCACCATATATGAAGGGAGATTTC
62-4	CTTTATGTACTGTCCGGTAGGCATGCCATCACATCTCGATAA
62-5	GTGATGGCATGGATCCTCCGTGAAATCTCCCTTAGGCGGTCGA
63-1	CTGTATGAGCATATCCTTCTCCAGCCAGTGTATTAGTAAAGGA
63-2	TCTGACCTACAGAAGTAATCATGCTCATACAGGCTCGTTGGT
63-3	ATGTAAAGGGTACACTGGCTGGAGAAGGATACCATTCTTGCA
63-4	TATACCTTTATCCTTTACTAATGAACGACCCATCTGTCCGAA
63-5	TGGGTCGTTCACCCTTTACATTGCAAGAATGGTGATTACTTCT
64-1	GTCGTTCCGGGCCTCCGGCGCAGACCGCGTCAGCGCATAATGC
64-2	ATAGAGTGCCCTGCCTCATCTCCCGGAACGACCAGGCGACTG
64-3	ACTATTTATGTGACGCGGTCTGCGCCGGAGGCGGACGCAGTA
64-4	TATCGGAATGGCATTATGCGCGATAACTGGCAGACTTACGAG
64-5	TGCCAGTTATCCATAAATAGTTACTGCGTCCGAGATGAGGCAG
65-1	CGGACCGAAAGCGAATCGCCTAATCGCTAGGTCCCTACAGGGC
65-2	CGTCCGTGCCACCCGCCAGACCTTTCGGTCCGATAATTTAAC
65-3	GCCGCGGACTACCTAGCGATTAGGCGATTCGTTAACGAAACC
65-4	AGATGTCGGTGCCCTGTAGGGCAACACGACTTGCGGCCTAAT
65-5	AAGTCGTGTTGAGTCCGCGGCGGTTTCGTTAAGTCTGGCGGGT
66-1	ATATTTATCGCACGACGCCGACTTCCCTTTCTATATCGATGAG
66-2	GACAACGAAGCTTCCGGAGGAGCGATAAATATATATAGGGCT
66-3	CCCGGGTGTGAGAAAGGGAAGTCGGCGTCGTCTGGCTTGAGT
66-4	ATTAAACTTTCTCATCGATATACAGCATGACCTATATAAGCT
66-5	GGTCATGCTGTCACACCCGGGACTCAAGCCAGTCCTCCGGAAG
67-1	CGCCGCTGAATCTCTAGCTCATTCTCCTTCAGGAAAGAGGAGA
67-2	CTAAGTTGTTCATTGCATCTTATTCAGCGGCGCAATAACCAG
67-3	TCCATAGGCGCTGAAGGAGAATGAGCTAGAGAAGTTCCAGCT
67-4	TCGAACTTTGTCTCCTCTTTCATACTAAACGTTTGCAGCAAA
67-5	ACGTTTAGTATCGCCTATGGAAGCTGGAACTTAAGATGCAATG
68-1	GGTCCACGCTGGGTTTACTGAGCTTGTCTTGCTGGCCCATTAA
68-2	GCCGCCTATAACTCTATAAGTCAGCGTGGACCAGGTGCAAGC
68-3	GGTCTAGCACGCAAGACAAGCTCAGTAAACCGGTCTGACGTC
68-4	AGACGCAACGTTAATGGGCCACTTAATACCAACCACATGTCT
68-5	TTGGTATTAAGGTGCTAGACCGACGTCAGACCACTTATAGAGT
69-1	TCGTTGTACCAAGCATACTGCGTAGTACTGGGCAGCCAAACCC
69-2	TTATTTATAATGGTGTCGCCCTGGTACAACGATCTCTTGGCC

69-3	CCCAGCCGGGCCCAGTACTACGCAGTATGCTGTAATTACTTT
69-4	TAGTGTAAACGGGTTTGGCTGCTACTTTCTCGCGCCGGGCAC
69-5	CGAGAAAGTAGCCCGGCTGGGAAAGTAATTACGGGCGACACCA
70-1	TTTGGGCAGGCTCCGTTGCTCCGGTTTATCACTCAAATGTCGT
70-2	TAAGAAAGGCCATTAAATATTGCCTGCCCAAAGTCTCCAATC
70-3	TAGTAACCATGTGATAAACCGGAGCAACGGAGTAGGCTCGCG
70-4	ACCATCCCAAACGACATTTGAGTGTGCACGTGCTGCCCATTG
70-5	CACGTGCACACATGGTTACTACGCGAGCCTACAATATTTAATG
71-1	CGTTTCCCTCGAATAATAGGGATCCGCCACTTCGTAATGGTGA
71-2	GTACATAAAGCCATACCCTGACGAGGGAAACGGTCCCTAAAT
71-3	CGATCGTTAGAAGTGGCGGATCCCTATTATTTAATCACTCCT
71-4	GTTTCCAAACTCACCATTACGTGGGCTTGTGCCTACGTCGAG
71-5	GCACAAGCCCACTAACGATCGAGGAGTGATTATCAGGGTATGG
72-1	GTCGTGCTTTGATCAGGCGTCCTGGTAAAGTCCAAGTTGTAGA
72-2	TAAAGGTATAAGTCCCTCAGCCAAAGCACGACTTATCGAGAT
72-3	GTGTATAGGCGACTTTACCAGGACGCCTGATCTGTACCTCCT
72-4	CCATTTATGTTCTACAACTTGCCAATGACGGGTTACCTGATG
72-5	CCCGTCATTGGGCCTATACACAGGAGGTACAGGCTGAGGGACT
73-1	TGCATATCGGGCCGGGATATCTTCGTAACTGAACCATAAAGGG
73-2	CATTCCGATACATTGGGAGGGCCCGATATGCATTCGGACAGA
73-3	TGTCGTGTCGTCAGTTACGAAGATATCCCGGTCGACAAGGTC
73-4	GCAACGTCGTCCCTTTATGGTCTGATGCCAATGGGATCACGA
73-5	ATTGGCATCAGCGACACGACAGACCTTGTCGACCCTCCCAATG
74-1	GGTCCTAAAGACGGGTCTACCCTATCCACGCGGTGCGAAAGAG
74-2	ACCGACATCTTTACATAACTATCTTTAGGACCCTCGTAAGTC
74-3	GTATTGCTTGCGCGTGGATAGGGTAGACCCGAACGAAAGCGT
74-4	AAGACGGCTTCTCTTTCGCACCGAGCATCAGACTCGGCTGGA
74-5	TCTGATGCTCGCAAGCAATACACGCTTTCGTTTAGTTATGTAA
75-1	CCGGATTCCTCAAGAAATCCTAGCATGTTTCGCATAAATATGT
75-2	AAAGTTTAATGTTTACCCTCAGAGGAATCCGGATTAGGCCGC
75-3	CGAGATCTGTCGAAACATGCTAGGATTTCTTGTTCGTAGCGC
75-4	ACAATAGTTAACATATTTATGAGACCCTGGGTAAAGGTGTTT
75-5	ACCCAGGGTCTACAGATCTCGGCGCTACGAACTGAGGGTAAAC
76-1	CAGGAATTAAGCTAGACGTTGTCGTGCGTGGCTTATCCCTAAC
76-2	CAAAGTTCGATACGTGGCTACCTTAATTCCTGAGCTTATATA
76-3	CTGTGAATCTGCCACGCACGACAACGTCTAGTCCTCCAGGTA
76-4	AAGCTGTGTTGTTAGGGATAATCCAAGTACAGCTTACCGGTT
76-5	CTGTACTTGGAAGATTCACAGTACCTGGAGGAGTAGCCACGTA
77-1	CGTGCGAGCGTCATCTGCCGAGAAATTATGTTCCCGAAGGGCT
77-2	CGTTGCGTCTGAGGGTCCGCGACGCTCGCACGTTTGCTGCAA
77-3	GTTGCTGCGTAACATAATTTCTCGGCAGATGAACCCTTCGCT
77-4	GATCTCAAATAGCCCTTCGGGTGATAAGCGCACTCCCTGTCA
77-5	TGCGCTTATCAACGCAGCAACAGCGAAGGGTTCGCGGACCCTC
78-1	TAGGAAATTTGGCTGAGCTGCTTAAGTCCGTGCTCCACACCCA
78-2	GTTTACACTAACTCCCTTGCGCAAATTTCCTAAGACATGTGG
78-3	TTGCTCGCGCCACGGACTTAAGCAGCTCAGCAGTTGCAGGTG
78-4	GGCATAAGTTTGGGTGTGGAGACGTTGAAATGGCACAGCCCT
78-5	CATTTCAACGTGCGCGAGCAACACCTGCAACTCGCAAGGGAGT
79-1	CGGGTGCCTTCTAGATTCTTGACACGTATTTAGGCCAATAACT

79-2	TTGGGATGGTCGTTGAAAGATGAAGGCACCCGGTGCCCGGCG
79-3	CAGGTTCACATAAATACGTGTCAAGAATCTACTATTTAAGGT
79-4	GCAAGCTCGAAGTTATTGGCCTTACTTTAAAGGTAATTGCAG
79-5	CTTTAAAGTAATGTGAACCTGACCTTAAATAGATCTTTCAACG
80-1	CGGTTACATCGAAACTCGAGGTCTATTTCCACTCAGGCTAGAG
80-2	CGATTTATATCTCCTCTAACTCGATGTAACCGCAATGGGCAG
80-3	GGACGTGTACGTGGAAATAGACCTCGAGTTTCTGTGTTTGTC
80-4	CCATAGTGCTCTCTAGCCTGAGTGGGCGATTAGACGGGCGCA
80-5	TAATCGCCCACGTACACGTCCGACAAACACAGAGTTAGAGGAG
81-1	GATTTACCTTCCCGCTAAGCCCTTGCTCACAAACTTGAAACAT
81-2	GTTTGGAAACGCGTGTACCGGGAAGGTAAATCTGGTGTGCTA
81-3	GAATACAGACTTGTGAGCAAGGGCTTAGCGGGCTGGCTCAGT
81-4	TTTTTTTTTTATGTTTCAAGTGGAAAGCTTCCTTTTTTTTTT
81-5	GGAAGCTTTCCGTCTGTATTCACTGAGCCAGCCCGGTACACGC
82-1	CGGCACTCGGCTACGACAGCTTAAAGGCTAGTGCGATCTGTTG
82-2	ACATAAATGGCTCAAAGAGTAGCCGAGTGCCGCTCGACGTAG
82-3	GGCAGCCTACACTAGCCTTTAAGCTGTCGTAACTCAGTGGGT
82-4	TTTTTTTTTTCAACAGATCGCACCCGTTCAGCTTTTTTTTTT
82-5	GCTGAACGGGTGTAGGCTGCCACCCACTGAGTTACTCTTTGAG
83-1	GGCCGCTACCTCCATAGGACAGGGCTCAACACCGCTAGACAGG
83-2	ACGACGTTGCAAATCGAGCTAAGGTAGCGGCCCATCAGGTAA
83-3	TCCCACTCGAGTGTTGAGCCCTGTCCTATGGCGAAACCAAAT
83-4	TTTTTTTTTTCCTGTCTAGCGGCTCGGTACAGTTTTTTTTTT
83-5	CTGTACCGAGCTCGAGTGGGAATTTGGTTTCGTAGCTCGATTT
84-1	ACGATTGTTACTATCCGTTTATCGGCGAAGATACCTGTGTGCT
84-2	AAGCCGTCTTTGGCAGCTGTAGTAACAATCGTTCGTGATCCC
84-3	GTGCAGAAAGATCTTCGCCGATAAACGGATACGAAATATATC
84-4	TTTTTTTTTTAGCACACAGGTCTGCATACTCTTTTTTTTTTT
84-5	AGAGTATGCAGCTTTCTGCACGATATATTTCGTACAGCTGCCA
85-1	ATCTGACGAACGATGTTGCTACTGGTCCAGTCTGCCGGCTGAA
85-2	TAACTATTGTTCAACGGTTAGGTTCGTCAGATTCCAGCCGAG
85-3	ACTATTAAACGACTGGACCAGTAGCAACATCTGTTAACATTC
85-4	TTTTTTTTTTTTCAGCCGGCAAGTTCCAACCATTTTTTTTTT
85-5	TGGTTGGAACTGTTTAATAGTGAATGTTAACACTAACCGTTGA
86-1	ATCAGTGCGGTCAGCGCGAACGGAATCCCAGTATAATGCAAAT
86-2	AACACAGCTTTGAGATATTGTACCGCACTGATAAACACCTTT
86-3	GAACTCCCTGACTGGGATTCCGTTCGCGCTGGACCCGCCAAT
86-4	TTTTTTTTTTTATTTGCATTATTTATTAGCTTATTTTTTTTTT
86-5	TAAGCTAATAACAGGGAGTTCATTGGCGGGTCACAATATCTCA
87-1	AACCCTTCAGTCGTAGACCCACACCCTTTGTAACACCGATGTC
87-2	ATTTGAGATCATCCAACAAACACTGAAGGGTTAACCGGTAAG
87-3	AAGCAATTCGTACAAAGGGTGTGGGTCTACGGGATCTGCTCT
87-4	TTTTTTTTTTGACATCGGTGTAGAGACGCTGATTTTTTTTTT
87-5	TCAGCGTCTCTCGAATTGCTTAGAGCAGATCCGTTTGTTGGAT
88-1	CCAAGAACCATTTACCCTATATTTACAATCCTCAGTGCCAGTT
88-2	AACTTATGCCTTCAACCGTCGATGGTTCTTGGTGACAGGGAG
88-3	AACACAGATAAGGATTGTAAATATAGGGTAAGTGCATCATAG
88-4	TTTTTTTTTTAACTGGCACTGATGACACCCGCTTTTTTTTTT
88-5	GCGGGTGTCATTATCTGTGTTCTATGATGCACCGACGGTTGAA

89-1	GTTTACTAGGTACGTCACTAACCTAACGCTAGCCAGCTAATCA
89-2	TCGAGCTTGCCGGAGGTTACAACCTAGTAAACAGGGCTGTGC
89-3	GAGCGATATACTAGCGTTAGGTTAGTGACGTGCACCCTTAGA
89-4	TTTTTTTTTTTGATTAGCTGGGCCTGATAAATTTTTTTTTTT
89-5	ATTTATCAGGCTATATCGCTCTCTAAGGGTGCTGTAACCTCCG
90-1	GGCCAGATAGGTCTACACACGTGGATCGTGCAAAGAGAAATGG
90-2	AGCACTATGGTATAATGTGAGCCTATCTGGCCCTGCAATTAC
90-3	ACGCTCTGGTTGCACGATCCACGTGTGTAGAACTGTTAGACC
90-4	TTTTTTTTTTCCATTTCTCTTCGACGCGCAGGTTTTTTTTTT
90-5	CCTGCGCGTCGACCAGAGCGTGGTCTAACAGTCTCACATTATA
A-1	GGGTAAGGATAACACGTCGCG
A-2	TCGTGATCTCCCACGTATTCA
A-3	GTCCCTCTAGGAGAGTTTAAC
A-4	CCTAGAGGGACTGAATACGTGGGAGATCACGACGCGACGTGTT
B-1	GCCTCTTAACACTTCAGTTAG
B-2	CTTAACGTATAACGAAATTAG
B-3	AGATCTTTGGTCTGACCCAAC
B-4	ACCAAAGATCTCTAATTTCGTTATACGTTAAGCTAACTGAAGT
C-1	AAGTTTACGCAGTTGACGATT
C-2	GAAAGCCCTGAGTCTCGTTGA
C-3	AGGTCCCTGCGGAAGAACCTA
C-4	CGCAGGGACCTTCAACGAGACTCAGGGCTTTCAATCGTCAACT
D-1	ACCATGAAACTGCGCCGCCCT
D-2	TGTTAGGCGTTCGGGAGGCCC
D-3	ATGCGATATGTTAGCACACCA
D-4	ACATATCGCATGGGCCTCCCGAACGCCTAACAAGGGCGGCGCA
A'-1	CGCCGTCGATCCTCGTCAGTACCAGGAAGCCCATTGGGAAGAA
A'-2	GATCGACGGCGTTTTTTTTTT
A'-3	GGGCTTCCTGGTACTGACGAG
A'-4	TGAGCCCGGATTCTTCCCAAT
B'-1	ACCTGTCCGTACGGTGCCCAAACATTAGACCATATTGGTTTGA
B'-2	TACGGACAGGTCCGAGAATCC
B'-3	TGGTCTAATGTTTGGGCACCG
B'-4	GATCTTCTGTTCAAACCAATA
C'-1	TACGGCGCTTTAGAGGCTTGTAATACTGGGCTGTCCATCACTT
C'-2	AAAGCGCCGTATTCAATGAAA
C'-3	AGCCCAGTATTACAAGCCTCT
C'-4	TTCATCCGGTAAGTGATGGAC
D'-1	GACCTCTGGATGCCACGTAGTGACGAGGCTCCGCTCTCTGGGC
D'-2	ATCCAGAGGTCATATCTTATC
D'-3	GGAGCCTCGTCACTACGTGGC
D'-4	ATATAAATCGGCCCAGAGAGC
E'-1	AGAGTCCTAGACAGAGGTGCGAGCCGCACGGCAATAATGGCCA
E'-2	TCTAGGACTCTTGCGCCCGTC
E'-3	GCCGTGCGGCTCGCACCTCTG
E'-4	TTTTTTTTTTTGGCCATTATT

Edge protector for pattern ‘I’

21-2-3'	TTTTTAGAGTTTAAC
21-2-5'	AACGCGGGCGTTTTT
22-2-3'	TTTTTTGGCGGGAAG
22-2-5'	AAATGGAGATTTTTT
23-2-3'	TTTTTTCGGATACAT
23-2-5'	GGTAGTTACCTTTTT
24-2-3'	TTTTTACGTACTAGG
24-2-5'	ATCCGCCGGTTTTTT
24-4-3'	TTTTTGCATCTAGGA
44-2-5'	CAAGTCCGCTTTTTT
44-4-3'	TTTTTGATCATTAAC
64-2-5'	GGCACTCTATTTTTT
64-4-3'	TTTTTCTCGTAAGTC
84-2-5'	AAGACGGCTTTTTTT

Edge protector for pattern heart

12-2-13-2	CGCACCATTGTCATGTGGCA
12-2-3'	TTTTTATAATGTTAC
12-4-5'	ATCTCCATTTTTTTT
17-2-18-2	CGGAAGATTGATACCCTCGT
18-2-5'	CGATTGTGGATTTTT
23-3-5'	CTGGACTCTATTTTT
24-4-23-4	AATGCCTACTCGTTTCTAGG
29-2-30-2	GTAGGAGTGGTGTGCCCTCT
30-2-5'	CCATAATCTGTTTTT
40-2-5'	GATCTTCTGTTTTTT
40-4-3'	TTTTTTTCAATGAAA
43-2-3'	TTTTTGGAGCGTCTG
43-2-44-2	CAGAAAGTACGACACATAAT
50-4-3'	TTTTTAGGTGTGAAT
50-4-49-4	CTTGTTGTATACTGATTCCA
52-2-3'	TTTTTTCTCCGCTTG
53-4-52-4	TCTGACCTACGCTCGTTGGT
58-4-3'	TTTTTTCTCTTGGCC
58-4-57-4	GCCGCCTATAAGGTGCAAGC
62-5-5'	ACTGGTACAGTTTTT
64-4-3'	TTTTTCTCGTAAGTC
64-4-5'	CATTCCGATATTTTT
65-4-3'	TTTTTATTAGGCCGC
65-4-5'	ACCGACATCTTTTTT
66-4-3'	TTTTTAGCTTATATA
66-4-5'	AAAGTTTAATTTTTT
67-4-3'	TTTTTTTTGCTGCAA
67-4-5'	CAAAGTTCGATTTTT

Pattern T

5-5-3'	TTAAAGTGTCTAACTTTCGTTGTAAGCGGCTTTCTCCTAAGAATTTTG GAAGGGATGGAGGA
6-1-3'	TCTCGAGCGGTGGGAATCCCTTCAAACAGATACCCAGTCGCGTTTTTG GAAGGGATGGAGGA
15-1-3'	TCAACTGAGGTAACACGGCGGATATGACTCACATAACCGATTATTTTG GAAGGGATGGAGGA
15-5-3'	TGCTTTGCTCTGACATTGATTTGTAGCAAACTACCGACTCGGATTTTG GAAGGGATGGAGGA
25-5-3'	ACATCGTTGGAAATTCCGCAATGTAGTACGACGGCGCGTTTGGTTTTG GAAGGGATGGAGGA
26-1-3'	ACTCGGGAGAAGGGAAGGGCCGACCAATAAAGACAATGCTGTATTTTG GAAGGGATGGAGGA
35-1-3'	TTACCCATTCAACAGTTTCAAGGACTGTTGTTTAGCCGCAGCATTTTG GAAGGGATGGAGGA
35-5-3'	GGTGTGCCAAATAGAATAACAGCTTTAGCGGCGCTGCCCGCCGTTTTG GAAGGGATGGAGGA
45-5-3'	GACAGTGCGGCCCGTTGTGAGGCAGTGAAAGAGTTAAGCCCGTTTTTG GAAGGGATGGAGGA
46-1-3'	TATTGTTACACATTGTGTGCCTGCCATTGGTAGTACGCATAGTTTTTG GAAGGGATGGAGGA
55-1-3'	ACTATAACGGGAGAGCAGCCCGGGACAAACTAAGTAGTCGCCTTTTTG GAAGGGATGGAGGA
55-5-3'	GCACTTCTATCCCAGCTCCGAACCCAATCATAAGAGTATAGCTTTTTG GAAGGGATGGAGGA
65-5-3'	AAGTCGTGTTGAGTCCGCGGCGGTTTCGTTAAGTCTGGCGGGTTTTTG GAAGGGATGGAGGA
66-1-3'	ATATTTATCGCACGACGCCGACTTCCCTTTCTATATCGATGAGTTTTG GAAGGGATGGAGGA
75-1-3'	CCGGATTCCTCAAGAAATCCTAGCATGTTTCGCATAAATATGTTTTTG GAAGGGATGGAGGA
75-5-3'	ACCCAGGGTCTACAGATCTCGGCGCTACGAACTGAGGGTAAACTTTTG GAAGGGATGGAGGA
81-1-5'	GGAAGGGATGGAGGATTTTGATTTACCTTCCCGCTAAGCCCTTGCTCA CAAACTTGAAACAT
81-5-3'	GGAAGCTTTCCGTCTGTATTCACTGAGCCAGCCCGGTACACGCTTTTG GAAGGGATGGAGGA
82-1-5'	GGAAGGGATGGAGGATTTTCGGCACTCGGCTACGACAGCTTAAAGGCT AGTGCGATCTGTTG
82-5-3'	GCTGAACGGGTGTAGGCTGCCACCCACTGAGTTACTCTTTGAGTTTTG GAAGGGATGGAGGA
83-1-5'	GGAAGGGATGGAGGATTTTGGCCGCTACCTCCATAGGACAGGGCTCAA CACCGCTAGACAGG
83-5-3'	CTGTACCGAGCTCGAGTGGGAATTTGGTTTCGTAGCTCGATTTTTTTG GAAGGGATGGAGGA
84-5-3'	AGAGTATGCAGCTTTCTGCACGATATATTTCGTACAGCTGCCATTTTG GAAGGGATGGAGGA
85-1-5'	GGAAGGGATGGAGGATTTTATCTGACGAACGATGTTGCTACTGGTCCA GTCTGCCGGCTGAA
85-5-3'	TGGTTGGAACTGTTTAATAGTGAATGTTAACACTAACCGTTGATTTTG GAAGGGATGGAGGA

86-1-5'	GGAAGGGATGGAGGATTTTATCAGTGCGGTCAGCGCGAACGGAATCCC AGTATAATGCAAAT
86-5-3'	TAAGCTAATAACAGGGAGTTCATTGGCGGGTCACAATATCTCATTTTG GAAGGGATGGAGGA
87-1-5'	GGAAGGGATGGAGGATTTTAACCCTTCAGTCGTAGACCCACACCCTTT GTAACACCGATGTC
87-5-3'	TCAGCGTCTCTCGAATTGCTTAGAGCAGATCCGTTTGTTGGATTTTTG GAAGGGATGGAGGA
88-1-5'	GGAAGGGATGGAGGATTTTCCAAGAACCATTTACCCTATATTTACAAT CCTCAGTGCCAGTT
88-5-3'	GCGGGTGTCATTATCTGTGTTCTATGATGCACCGACGGTTGAATTTTG GAAGGGATGGAGGA
89-1-5'	GGAAGGGATGGAGGATTTTGTTTACTAGGTACGTCACTAACCTAACGC TAGCCAGCTAATCA
89-5-3'	ATTTATCAGGCTATATCGCTCTCTAAGGGTGCTGTAACCTCCGTTTTG GAAGGGATGGAGGA
90-1-5'	GGAAGGGATGGAGGATTTTGGCCAGATAGGTCTACACACGTGGATCGT GCAAAGAGAAATGG
90-5-3'	CCTGCGCGTCGACCAGAGCGTGGTCTAACAGTCTCACATTATATTTTG GAAGGGATGGAGGA
Biotin	TCCTCCATCCCTTCC/3Bio/

Infinite-size lattice III

A-1	AGTAATGACGATACTCAAACCTCATACCCTAGCAGAGGGCCATTAGA
A-2	CGTACAAGCCACGTTAACATATCGTCATTACTGGGATG
A-3	TACGCACCAGTGCTAGGGTATGAGGTTTGAGGCTGTTCCGTG
A-4	CTACCGTCTAATGGCCCTCGCAGGAGAAGCGAAGGGCC
A-5	TCGCTTCTCCTGCCTGGTGCGTACACGGAACAGCTGTTAACGTGGCT
B-1	CATGTCGGAAGTGTACGCCGACAGGGCAGAAAGCGCTGACTTGGCGG
B-2	CGGTAGTAACAGCCTCCAACACTTCCGACATGGGCCCT
B-3	TTGTAGGCCGGCTTTCTGCCCTGTCGGCGTACTAGTTGGCGG
B-4	TGTACGCCGCCAAGTCAGCCACACAGTCGAGACATCCC
B-5	TCTCGACTGTGTGCGGCCTACAACCGCCAACTAGTTGGAGGCTGTTA

Infinite-size lattice IV

A-1	GCAGGGCCGTCATACTACCGCGCAAGGGCACCTGGAT
A-2	CCTAGGGTGTACGGGCCCTGCGTGGG
A-3	CACCACGCATGCCCTTGCGCGGTAGTATGACCCAATACTCAA
A-4	TGTAGATCCAGGTATTTAATGACTTC
A-5	CATTAAATATGCGTGGTGTTGAGTATTGGCGTACACC
B-1	GCCGCCAATCCTAATGGTGAAACCGTTCAGGGTGAAT
B-2	CTACAAGAATTTGTTGGCGGCGAAGT
B-3	TAGAAAGTAGTGAACGGTTTCACCATTAGGAGTAAGAGAAGC
B-4	CTAGGATTCACCCGCCCTCGGCCCAC
B-5	CCGAGGGCCTACTTTCTAGCTTCTCTTACCAAATTCT