

## ??Tournament Boards

The following is the set of boards to use for tournament play. You should encode all of these and run your program against each. Submit the form on the last page to report your results from playing against each of these. When you submit your code, you should include the encoding of all of these boards and your “readme.txt” file should identify what the TAs need to do execute your program against any of them.

Lab machines to use: sand, thunder, storm, and rain.

### 1. 5x5 - normal

```
333
1 03
2 23
22112
3
```

### 2. 5x5 - normal

```
2 2
20202
3 3
21 1
2
```

### 3. 5x5 -hard

```
3 32
2
3 0
3 2
1
```

### 4. 5x5 - hard

```
1 3
31 2
312
2 2
3 02
```

### 5. 7x7 - normal

```
2 132
3 2
2
221 02
22223
2 122
32 22
```

### 6. 7x7 - normal

```
222
2 2
3123
311 3
1 03
2323
```

```
3 2 2
```

### 7. 7x7 - hard

```
3 322
2 11 1
2 132
2 2
3 2
120 2
33 32
```

### 8. 10x10 - normal

```
1 2 33332
22 12 0213
2 311 2
2 1 1 2
323 3
21 13 2 0
222 2 2 3
12 32 2
2 22 2 3
2 323
```

### 9. 10x10 - hard

```
33 3 2
30 31 3
3 22
2 232
1 1 3
32 1 3123
22 2
2 2 3 2122
3 2 1322
2 3
```

### 10. 15x15 - normal

```
23223 32 1
2 13 222
33 121 213231
2 2 22 2 2
21 32 011
32311
2 2 2 2 2 13
2 323 322223
1 1 1 03
1 2 2 3
3 2 2 303222
113122 3 31
2 2 11
2212 223
3 1 2 32 23
```

### 11. 15x15 - hard

```
      22  322
1 1  222
  32 2 231 12 21
2 211 1232 322
  222222  2
    2      22
1 2 2 22331 22
  2 21  2  3 322
    2 3    3 20
  11 2  1    22
3 3222 2    32
  1 2 2  13
  20 2321  1
22  2223  2 2
1    2    3 3
```

### 12. 20x20 - normal

```
      1          3    12 2
2 22  23 22    22 2
  2323  1322 1    3
2    1 1    121    1 22
21    3 22    1 32  3
2321  323  1  2 1213
      11223  1 32 3
  222 32  231 2  2 3
  3 2    3  022 21 1 2
  1 2          0 1323  1
3 3  12  12    2    3
3 1  2 3231212 2  23
2 2 23    3          2
2 2 2 2 12 2 2 2  2
2 2 21 21 232212221
  322 22 1 2 1 2 121
2    2113          122 23
  1 22 23 122    112
  22202    112    2
3 32333223222223  2
```

### 13. 20x20 - hard

```
3  2  32333    1
  23    2 2 3 1  2 2
3  3121 2222 131 322
211    1    3    3
      222132 1    2 312
  1    3 2  2  321    1
  3  2  3    3    32
1    1    31  3 1  3
  311 3 3    2  21  2
      22    2  30232 2
32 31          2  23
2    22 21  22 20111
  3 1 2  3 122 3 2
213  23    2322  32
      1  112    21  1  1
31  13    2    1 232
3 3 2 21    3  211 1
3121 2 23321    21 3
3          1    32 2 22
      213          3
```

### 14. 20x20 - hard

```
3222          32    20
22 133    2    33
  23    213    0 213 3
  2 2    3232  2 2
21312    2 2    1
21    3 3 30 1    1
  12 2    2    223
  3  13    2 2231
12 2 12    2 3 2 2 3
2 121  2 3  13
2 2 3  31  1122
  312112 232  221 2
  2 3    3  21122
3    2212    2 2 23
  311 1  32 1 1  13 2
1112  211    2232
32  1    2 1 3    12
  2 3 3 2 3  32 2323
  2    22  2 3  2  3
3  3    213    2  2
```

2 222 233 23 1 2 2 2  
 3 2222 213123323

# 15. 25x30 - normal

32 232  
 3121 3 22 223 2 2 2  
 212323222113 2 1 3 311  
 21 2 2 1  
 3 2 32 2 231 33  
 20 23 2 2 2222 22  
 31 222 1112 2 203 3 2  
 2320201 3 31 1122 1223  
 1 1 30 13 1  
 3 310 21 23  
 2 2 3 2 12 21  
 3 31312 2 2 2 3 22  
 3 2 31 2 3 2 2102  
 3213 2 0 22 1 33 0 22  
 2 222 3 22 2 1 3322  
 2 2 3 22332 12  
 2 23 1 22  
 21 321 2 2 3 22 332 2  
 3 3 333 21 1 2 1 3  
 0222 3311 23 303  
 22 2 2 2 12 2 3  
 222313 122 10 12 2 1  
 2 2 2 3 2233  
 2 022322 2 22222 2  
 3 1 2 2 31 121 21  
 22 2123 23231232  
 223 32213 1 3 2  
 222 2 03 3 1 122

Name: Kushagra Udai

Language Used: C-LISP

Machine used: Personal Computer (Intel i7 4510U – 2.00GHz TurboClock upto 2.6GHz)

(Using best of 3 runs)

BOARD #	Execution Time (CPU Seconds)
1	0.015625
2	0.015625
3	0.015625
4	0.015625
5	0.015625
6	0.515625
7	X
8	X
9	X
10	X
11	X
12	X
13	X
14	X
15	X

X : Failed to find solution even after 10 minutes of execution. ☹