```
1 "C:\Program Files\Java\jdk1.8.0 181\bin\java.exe" "-
   javaagent:D:\Program Files\JetBrains\IntelliJ IDEA
   Community Edition 2018.2.3\lib\idea rt.jar=56858:D:\
   Program Files\JetBrains\IntelliJ IDEA Community Edition
   2018.2.3\bin" -Dfile.encoding=UTF-8 -classpath "C:\Program
    Files\Java\jdk1.8.0_181\jre\lib\charsets.jar;C:\Program
   Files\Java\jdk1.8.0 181\jre\lib\deploy.jar;C:\Program
   Files\Java\jdk1.8.0 181\jre\lib\ext\access-bridge-64.jar;C
   :\Program Files\Java\jdk1.8.0 181\jre\lib\ext\cldrdata.jar
   ;C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\dnsns.jar;
   C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\jaccess.jar
   ;C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\jfxrt.jar;
   C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\localedata.
   jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\nashorn
   .jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\sunec.
   jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib\ext\
   sunjce provider.jar;C:\Program Files\Java\jdk1.8.0 181\jre
   \lib\ext\sunmscapi.jar;C:\Program Files\Java\jdk1.8.0 181\
   jre\lib\ext\sunpkcs11.jar;C:\Program Files\Java\jdk1.8.
   0 181\jre\lib\ext\zipfs.jar;C:\Program Files\Java\jdk1.8.
   0 181\jre\lib\javaws.jar;C:\Program Files\Java\jdk1.8.
   0 181\jre\lib\jce.jar;C:\Program Files\Java\jdk1.8.0 181\
   jre\lib\jfr.jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib
   \jfxswt.jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib\
   jsse.jar;C:\Program Files\Java\jdk1.8.0 181\jre\lib\
  management-agent.jar;C:\Program Files\Java\jdk1.8.0 181\
   jre\lib\plugin.jar;C:\Program Files\Java\jdk1.8.0 181\jre\
   lib\resources.jar;C:\Program Files\Java\jdk1.8.0_181\jre\
   lib\rt.jar;D:\Users\Marvin\Documents\AFIT Docs\AFIT Git\
  AFIT\CSCE 523\LOASingle\out\production\LOASingle" LOAGUI
 2 DoneRefresh
 3 Depth: 1 Time: 0.009 Nodes Searched: 1347 Leaf Nodes: 0
 4 DoneRefresh
 5 Depth: 3 Time: 0.099 Nodes Searched: 182899 Leaf Nodes: 0
 6 DoneRefresh
 7 Depth: 5 Time: 5.284 Nodes Searched: 13509026 Leaf Nodes:
8 Nodes per Second = 2591459.500378501
9 Search Time: 5.285s Best move: a7-c7
10
11 DoneRefresh
12 Depth: 1 Time: 0.009 Nodes Searched: 1347 Leaf Nodes: 0
13 DoneRefresh
14 Depth: 3 Time: 0.182 Nodes Searched: 184307 Leaf Nodes: 0
15 DoneRefresh
```

```
16 Depth: 5 Time: 5.346 Nodes Searched: 14980481 Leaf Nodes:
17 Nodes per Second = 2836912.6449682005
18 Search Time: 5.346s Best move: h3-e6
19
20 DoneRefresh
21 Depth: 1 Time: 0.001 Nodes Searched: 1263 Leaf Nodes: 0
22 DoneRefresh
23 Depth: 3 Time: 0.062 Nodes Searched: 182142 Leaf Nodes: 0
24 DoneRefresh
25 Depth: 5 Time: 6.19 Nodes Searched: 16323797 Leaf Nodes: 0
26 Nodes per Second = 2666753.1502423263
27 Search Time: 6.19s Best move: h6-d6
28
29 DoneRefresh
30 Depth: 1 Time: 0.0 Nodes Searched: 1347 Leaf Nodes: 0
31 DoneRefresh
32 Depth: 3 Time: 0.066 Nodes Searched: 207851 Leaf Nodes: 0
33 DoneRefresh
34 Depth: 5 Time: 7.064 Nodes Searched: 21005018 Leaf Nodes:
35 Nodes per Second = 3003144.960362401
36 Search Time: 7.064s Best move: a6-c4
37
38 DoneRefresh
39 Depth: 1 Time: 0.001 Nodes Searched: 1350 Leaf Nodes: 0
40 DoneRefresh
41 Depth: 3 Time: 0.07 Nodes Searched: 208222 Leaf Nodes: 0
42 DoneRefresh
43 Depth: 5 Time: 7.362 Nodes Searched: 21695687 Leaf Nodes:
44 Nodes per Second = 2975449.470252649
45 Search Time: 7.362s Best move: h7-e4
46
47 DoneRefresh
48 Depth: 1 Time: 0.001 Nodes Searched: 1437 Leaf Nodes: 0
49 DoneRefresh
50 Depth: 3 Time: 0.087 Nodes Searched: 276592 Leaf Nodes: 0
51 DoneRefresh
52 Depth: 5 Time: 11.742 Nodes Searched: 34546355 Leaf Nodes
  : 0
53 \text{ Nodes per Second} = 2965796.6274910574}
54 Search Time: 11.742s Best move: h5-f5
55
56 DoneRefresh
```

```
57 Depth: 1 Time: 0.001 Nodes Searched: 1265 Leaf Nodes: 0
58 DoneRefresh
59 Depth: 3 Time: 0.056 Nodes Searched: 175646 Leaf Nodes: 0
60 DoneRefresh
61 Depth: 5 Time: 7.995 Nodes Searched: 23185187 Leaf Nodes
62 Nodes per Second = 2922088.555347092
63 Search Time: 7.995s Best move: h2-f2
64
65 DoneRefresh
66 Depth: 1 Time: 0.001 Nodes Searched: 1136 Leaf Nodes: 0
67 DoneRefresh
68 Depth: 3 Time: 0.047 Nodes Searched: 141450 Leaf Nodes: 0
69 DoneRefresh
70 Depth: 5 Time: 5.041 Nodes Searched: 13636332 Leaf Nodes
71 Nodes per Second = 2733369.966276532
72 Search Time: 5.041s Best move: e6-e3
73
74 DoneRefresh
75 Depth: 1 Time: 0.001 Nodes Searched: 1007 Leaf Nodes: 0
76 DoneRefresh
77 Depth: 3 Time: 0.055 Nodes Searched: 177026 Leaf Nodes: 0
78 DoneRefresh
79 Depth: 5 Time: 6.187 Nodes Searched: 18393382 Leaf Nodes
80 Nodes per Second = 3001683.368352998
81 Search Time: 6.187s Best move: h4-f6
82
83 DoneRefresh
84 Depth: 1 Time: 0.001 Nodes Searched: 1134 Leaf Nodes: 0
85 DoneRefresh
86 Depth: 3 Time: 0.062 Nodes Searched: 207286 Leaf Nodes: 0
87 DoneRefresh
88 Depth: 5 Time: 7.586 Nodes Searched: 22082310 Leaf Nodes
89 Nodes per Second = 2938403.638281044
90 Search Time: 7.586s Best move: a5-c5
91
92 DoneRefresh
93 Depth: 1 Time: 0.001 Nodes Searched: 928 Leaf Nodes: 0
94 DoneRefresh
95 Depth: 3 Time: 0.042 Nodes Searched: 134744 Leaf Nodes: 0
96 DoneRefresh
97 Depth: 5 Time: 3.809 Nodes Searched: 10781484 Leaf Nodes
```

```
97:0
98 Nodes per Second = 2866147.545287477
99 Search Time: 3.809s Best move: a4-b5
100
101 DoneRefresh
102 Depth: 1 Time: 0.001 Nodes Searched: 580 Leaf Nodes: 0
103 DoneRefresh
104 Depth: 3 Time: 0.018 Nodes Searched: 51069 Leaf Nodes: 0
105 DoneRefresh
106 Depth: 5 Time: 1.217 Nodes Searched: 3704502 Leaf Nodes:
107 DoneRefresh
108 Depth: 7 Time: 92.62 Nodes Searched: 259951629 Leaf Nodes
109 Nodes per Second = 2847201.252429281
110 Search Time: 92.62s Best move: e4-d5
111
112 DoneRefresh
113 Depth: 1 Time: 0.0 Nodes Searched: 703 Leaf Nodes: 0
114 DoneRefresh
115 Depth: 3 Time: 0.022 Nodes Searched: 71689 Leaf Nodes: 0
116 DoneRefresh
117 Depth: 5 Time: 1.965 Nodes Searched: 6039657 Leaf Nodes:
118 DoneRefresh
119 Depth: 7 Time: 168.722 Nodes Searched: 481837792 Leaf
   Nodes: 0
120 Nodes per Second = 2892034.4768317114
121 Search Time: 168.723s Best move: f6-g5
122
123 DoneRefresh
124 Depth: 1 Time: 0.0 Nodes Searched: 753 Leaf Nodes: 0
125 DoneRefresh
126 Depth: 3 Time: 0.021 Nodes Searched: 61756 Leaf Nodes: 0
127 DoneRefresh
128 Depth: 5 Time: 1.37 Nodes Searched: 4083441 Leaf Nodes: 0
129 DoneRefresh
130 Depth: 7 Time: 114.046 Nodes Searched: 319232507 Leaf
   Nodes: 0
131 Nodes per Second = 2835508.978833102
132 Search Time: 114.046s Best move: q5-e3
133
134 DoneRefresh
135 Depth: 1 Time: 0.0 Nodes Searched: 632 Leaf Nodes: 0
136 DoneRefresh
```

```
137 Depth: 3 Time: 0.017 Nodes Searched: 50753 Leaf Nodes: 0
138 DoneRefresh
139 Depth: 5 Time: 1.011 Nodes Searched: 3212477 Leaf Nodes:
140 DoneRefresh
141 Depth: 7 Time: 88.769 Nodes Searched: 253541362 Leaf
   Nodes: 0
142 Nodes per Second = 2892960.6506776013
143 Search Time: 88.769s Best move: c7-e7
144
145 DoneRefresh
146 Depth: 1 Time: 0.0 Nodes Searched: 531 Leaf Nodes: 0
147 DoneRefresh
148 Depth: 3 Time: 0.016 Nodes Searched: 51085 Leaf Nodes: 0
149 DoneRefresh
150 Depth: 5 Time: 1.597 Nodes Searched: 5319590 Leaf Nodes:
151 DoneRefresh
152 Depth: 7 Time: 159.854 Nodes Searched: 493115282 Leaf
   Nodes: 0
153 Nodes per Second = 3118386.077295532
154 Search Time: 159.854s Best move: a2-e6
155
156 DoneRefresh
157 Depth: 1 Time: 0.0 Nodes Searched: 643 Leaf Nodes: 0
158 DoneRefresh
159 Depth: 3 Time: 0.028 Nodes Searched: 95822 Leaf Nodes: 0
160 DoneRefresh
161 Depth: 5 Time: 3.756 Nodes Searched: 12910346 Leaf Nodes
162 Nodes per Second = 3462942.225772098
163 Search Time: 3.756s Best move: c4-b4
164
165
```