```
~/Desktop via 

base
```

→ ./othello.sh !OTHELLO!

Choose player using BLACK:

Player's to choose from: human,random,alpha,expec,minmax,

> minmax

Choose Level 1. Easy 2. Medium 3. Hard

>2

Choose player using WHITE:

Player's to choose from: human,random,alpha,expec,minmax,

> minmax

Choose Level 1. Easy 2. Medium 3. Hard

> 3

Move made by '@' is: 56 in 0.000325 seconds Move made by 'o' is: 66 in 8.454968 seconds Move made by '@' is: 76 in 0.362461 seconds Move made by 'o' is: 77 in 32.341739 seconds Move made by '@' is: 43 in 0.649598 seconds Move made by 'o' is: 86 in 63.610783 seconds Move made by '@' is: 88 in 0.134888 seconds Move made by 'o' is: 68 in 8.952298 seconds Move made by 'o' is: 46 in 7.487112 seconds Move made by '@' is: 47 in 0.617284 seconds Move made by 'o' is: 38 in 67.815636 seconds Move made by '@' is: 67 in 0.463832 seconds Move made by 'o' is: 57 in 129.175372 seconds Move made by '@' is: 78 in 1.19824 seconds Move made by 'o' is: 53 in 246.445259 seconds Move made by '@' is: 87 in 5.710208 seconds Move made by 'o' is: 37 in 244.263264 seconds Move made by '@' is: 85 in 4.036623 seconds Move made by 'o' is: 34 in 133.720921 seconds Move made by '@' is: 63 in 3.057521 seconds Move made by 'o' is: 42 in 191.237389 seconds Move made by '@' is: 58 in 3.702237 seconds Move made by 'o' is: 73 in 238.239751 seconds Move made by '@' is: 75 in 4.058348 seconds Move made by 'o' is: 65 in 26.391984 seconds Move made by '@' is: 52 in 1.523982 seconds Move made by 'o' is: 62 in 108.634612 seconds Move made by '@' is: 36 in 2.236136 seconds Move made by 'o' is: 64 in 151.121956 seconds Move made by '@' is: 31 in 4.951582 seconds Move made by 'o' is: 41 in 574.869885 seconds Move made by '@' is: 51 in 7.944018 seconds Move made by 'o' is: 27 in 311.510836 seconds Move made by '@' is: 35 in 5.572893 seconds Move made by 'o' is: 74 in 188.008024 seconds Move made by '@' is: 61 in 4.063372 seconds Move made by 'o' is: 72 in 17.276494 seconds Move made by '@' is: 48 in 2.234931 seconds Move made by 'o' is: 26 in 9.193957 seconds Move made by '@' is: 28 in 1.363051 seconds Move made by '@' is: 82 in 1.067452 seconds Move made by 'o' is: 84 in 8.807735 seconds Move made by '@' is: 83 in 0.804405 seconds Move made by 'o' is: 81 in 5.431147 seconds Move made by '@' is: 18 in 0.374386 seconds

Move made by '@' is: 33 in 0.203156 seconds Move made by 'o' is: 32 in 5.734463 seconds Move made by '@' is: 21 in 0.487534 seconds Move made by 'o' is: 25 in 5.394022 seconds Move made by '@' is: 14 in 0.272356 seconds Move made by 'o' is: 24 in 1.384809 seconds Move made by '@' is: 16 in 0.07858 seconds Move made by 'o' is: 23 in 0.191007 seconds Move made by '@' is: 12 in 0.021513 seconds Move made by 'o' is: 22 in 0.021585 seconds Move made by '@' is: 11 in 0.002285 seconds Move made by 'o' is: 17 in 0.001431 seconds Move made by '@' is: 71 in 0.000842 seconds Move made by 'o' is: 15 in 0.000216 seconds Move made by '@' is: 13 in 0.000172 seconds Black wins!

Score for BLACK is: 53 and WHITE is: 11

Total time taken by Black(@) is: 57.19421100000001 seconds and average per move is:

1.8449745483870972

Total time taken by White(o) is: 2785.7186549999997 seconds and average per move is: 96.05926396551723

12345678

1@@@@ooo@

2@@@@oo@@

3@0@@@@@

4@0@0@@@

5@@o@@@@@

6@0@@@@@

7@@@@@@@@

80000000000

./othello.sh: line 3: alpha: command not found ./othello.sh: line 4: 3: command not found ./othello.sh: line 5: expec: command not found ./othello.sh: line 6: 3: command not found

~/Desktop via base took 47m 29s

→