```
~/Desktop via @ base
```

→ ./othello.sh !OTHELLO!

Choose player using BLACK:

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

> expec

Choose Level 1. Easy 2. Medium 3. Hard

> 3

Choose player using WHITE:

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

> expec

Choose Level 1. Easy 2. Medium 3. Hard

> 1

Move made by '@' is: 65 in 0.000797 seconds Move made by 'o' is: 64 in 0.04704 seconds Move made by '@' is: 73 in 674.905224 seconds Move made by 'o' is: 74 in 0.306066 seconds Move made by '@' is: 75 in 1608.436996 seconds Move made by 'o' is: 82 in 0.364922 seconds Move made by '@' is: 72 in 1909.521936 seconds Move made by 'o' is: 76 in 0.388429 seconds Move made by '@' is: 63 in 4842.907947 seconds Move made by 'o' is: 71 in 0.659986 seconds Move made by '@' is: 87 in 4526.430675 seconds Move made by 'o' is: 62 in 0.45207 seconds Move made by '@' is: 85 in 1804.038047 seconds Move made by 'o' is: 77 in 0.284409 seconds Move made by '@' is: 84 in 1966.253618 seconds Move made by 'o' is: 43 in 0.209653 seconds Move made by '@' is: 78 in 9233.971658 seconds Move made by 'o' is: 35 in 0.215023 seconds Move made by '@' is: 66 in 282.367958 seconds Move made by 'o' is: 67 in 0.033487 seconds Move made by '@' is: 51 in 663.368327 seconds Move made by 'o' is: 52 in 0.186076 seconds Move made by '@' is: 41 in 742.544466 seconds Move made by 'o' is: 42 in 0.150019 seconds Move made by '@' is: 53 in 1395.496061 seconds Move made by 'o' is: 61 in 0.109461 seconds Move made by '@' is: 58 in 1880.347653 seconds Move made by 'o' is: 68 in 0.112969 seconds Move made by '@' is: 57 in 1503.791558 seconds Move made by 'o' is: 48 in 0.134941 seconds Move made by '@' is: 56 in 1491.25651 seconds Move made by 'o' is: 46 in 0.095828 seconds Move made by '@' is: 83 in 410.151249 seconds Move made by 'o' is: 86 in 0.037997 seconds Move made by '@' is: 47 in 259.820846 seconds Move made by 'o' is: 34 in 0.106255 seconds Move made by '@' is: 23 in 325.957331 seconds Move made by 'o' is: 24 in 0.144616 seconds Move made by '@' is: 14 in 474.145768 seconds Move made by 'o' is: 25 in 0.120543 seconds Move made by '@' is: 15 in 375.641437 seconds Move made by 'o' is: 12 in 0.100373 seconds Move made by '@' is: 22 in 152.881208 seconds Move made by 'o' is: 32 in 0.07986 seconds Move made by '@' is: 21 in 81.336971 seconds Move made by 'o' is: 33 in 0.062922 seconds

Move made by '@' is: 31 in 13.832307 seconds Move made by 'o' is: 13 in 0.039185 seconds Move made by '@' is: 36 in 24.38616 seconds Move made by 'o' is: 27 in 0.02935 seconds Move made by '@' is: 37 in 5.669683 seconds Move made by 'o' is: 28 in 0.020863 seconds Move made by '@' is: 38 in 0.568862 seconds Move made by 'o' is: 16 in 0.007879 seconds Move made by '@' is: 26 in 0.031113 seconds Move made by 'o' is: 17 in 0.001926 seconds Move made by '@' is: 18 in 0.000934 seconds Move made by 'o' is: 11 in 0.000435 seconds Move made by '@' is: 81 in 0.000161 seconds

Black wins!

Score for BLACK is: 33 and WHITE is: 30

Total time taken by Black(@) is: 36650.063461 seconds and average per move is: 1221.6687820333332

Total time taken by White(o) is: 4.5025830000000004 seconds and average per move is:

0.1552614827586207

12345678

10000000@

200@@@0@@

30@000@@@

40@00@0@@

500@@0@0@

600@@@0@@

7 o @ o @ o o o @

8@@@@@@.

./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 10h 11m 22s

→