

~/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,

> alpha

Choose Level 1.Easy 2.Medium 3.Hard

> 2

Move made by '@' is: 56 in 0.00025 seconds

Move made by 'o' is: 64 in 0.063555 seconds

Move made by '@' is: 73 in 145.758553 seconds

Move made by 'o' is: 66 in 0.144832 seconds

Move made by '@' is: 65 in 729.433761 seconds

Move made by 'o' is: 36 in 0.121628 seconds

Move made by '@' is: 77 in 4286.485949 seconds

Move made by 'o' is: 88 in 0.238978 seconds

Move made by '@' is: 67 in 1225.360798 seconds

Move made by 'o' is: 75 in 0.25248 seconds

Move made by '@' is: 87 in 1255.650078 seconds

Move made by 'o' is: 53 in 0.227869 seconds

Move made by '@' is: 63 in 553.532375 seconds

Move made by 'o' is: 83 in 0.394244 seconds

Move made by '@' is: 82 in 2397.475456 seconds

Move made by 'o' is: 81 in 0.888067 seconds

Move made by '@' is: 43 in 1751.734836 seconds

Move made by 'o' is: 33 in 0.359037 seconds

Move made by '@' is: 22 in 3651.418937 seconds

Move made by 'o' is: 68 in 0.478606 seconds

Move made by '@' is: 27 in 6876.932949 seconds

Move made by 'o' is: 11 in 0.183026 seconds

Move made by '@' is: 78 in 1676.056693 seconds

Move made by 'o' is: 18 in 0.083566 seconds

Move made by '@' is: 74 in 136.479799 seconds

Move made by 'o' is: 46 in 0.140294 seconds

Move made by '@' is: 76 in 563.732359 seconds

Move made by 'o' is: 85 in 0.061971 seconds

Move made by '@' is: 26 in 59.015179 seconds

Move made by 'o' is: 57 in 0.233554 seconds

Move made by '@' is: 28 in 638.259752 seconds

Move made by 'o' is: 47 in 0.183113 seconds

Move made by '@' is: 32 in 120.426531 seconds

Move made by 'o' is: 31 in 0.281762 seconds

Move made by '@' is: 21 in 1142.673387 seconds

Move made by 'o' is: 16 in 0.470487 seconds

Move made by '@' is: 12 in 1092.401523 seconds

Move made by 'o' is: 42 in 0.381531 seconds

Move made by '@' is: 25 in 614.900343 seconds

Move made by 'o' is: 14 in 0.323694 seconds

Move made by '@' is: 58 in 479.431092 seconds

Move made by 'o' is: 48 in 0.256923 seconds

Move made by '@' is: 84 in 183.41232 seconds
 Move made by 'o' is: 86 in 0.152979 seconds
 Move made by '@' is: 41 in 74.801992 seconds
 Move made by 'o' is: 51 in 0.073865 seconds
 Move made by '@' is: 52 in 37.669516 seconds
 Move made by 'o' is: 61 in 0.157792 seconds
 Move made by '@' is: 72 in 37.381537 seconds
 Move made by 'o' is: 62 in 0.060142 seconds
 Move made by '@' is: 23 in 5.435672 seconds
 Move made by 'o' is: 13 in 0.023234 seconds
 Move made by '@' is: 71 in 0.431451 seconds
 Move made by 'o' is: 38 in 0.004333 seconds
 Move made by '@' is: 37 in 0.02106 seconds
 Move made by 'o' is: 15 in 0.004269 seconds
 Move made by '@' is: 24 in 0.001543 seconds
 Move made by 'o' is: 34 in 0.000813 seconds
 Move made by '@' is: 35 in 0.000243 seconds
 Move made by '@' is: 17 in 0.000118 seconds
 White wins!

Score for BLACK is: 22 and WHITE is: 42


Total time taken by Black(@) is: 29736.316052000006 seconds and average per move is: 959.2360016774195

Total time taken by White(o) is: 6.246643999999997 seconds and average per move is: 0.2154015172413792

```

1 2 3 4 5 6 7 8
1 o o o o o @ o
2 o o o o @ @ o
3 o o o @ o @ o
4 o @ o @ @ @ o
5 o o @ @ @ @ o
6 o @ o o o @ o
7 @ @ @ @ o o o
8 o o o @ o o o
  
```

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

~/Desktop via  base took 8h 15m 48s

