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Tejass-MBP-2:testothello tejasmunees$ clear
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Tejass-MBP-2:testothello tejasmunees$ python3 play.py  
!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,  
> minmax
```

```
Choose Level 1.Easy 2.Medium 3.Hard
```

```
> 1
```

```
Move made by '@' is: 56 in 0.000725 seconds  
Move made by 'o' is: 64 in 0.01062 seconds  
Move made by '@' is: 73 in 310.191854 seconds  
Move made by 'o' is: 74 in 0.023286 seconds  
Move made by '@' is: 75 in 679.784229 seconds  
Move made by 'o' is: 84 in 0.035885 seconds  
Move made by '@' is: 43 in 696.907538 seconds  
Move made by 'o' is: 66 in 0.056039 seconds  
Move made by '@' is: 77 in 1998.125262 seconds  
Move made by 'o' is: 57 in 0.034143 seconds  
Move made by '@' is: 65 in 1308.781332 seconds  
Move made by 'o' is: 34 in 0.070021 seconds  
Move made by '@' is: 47 in 12130.104343 seconds  
Move made by 'o' is: 88 in 0.139784 seconds  
Move made by '@' is: 67 in 17550.389093 seconds  
Move made by 'o' is: 78 in 0.16013 seconds  
Move made by '@' is: 87 in 11825.98674 seconds  
Move made by 'o' is: 86 in 0.124107 seconds  
Move made by '@' is: 25 in 7759.922064 seconds  
Move made by 'o' is: 82 in 0.118178 seconds  
Move made by '@' is: 46 in 2306.324097 seconds  
Move made by 'o' is: 23 in 0.072157 seconds  
Move made by '@' is: 24 in 2502.927402 seconds  
Move made by 'o' is: 48 in 0.095681 seconds  
Move made by '@' is: 12 in 3743.443166 seconds  
Move made by 'o' is: 76 in 0.031397 seconds  
Move made by '@' is: 35 in 188.71874 seconds  
Move made by 'o' is: 15 in 0.050261 seconds  
Move made by '@' is: 36 in 370.107311 seconds  
Move made by 'o' is: 27 in 0.052304 seconds  
Move made by '@' is: 26 in 409.906295 seconds  
Move made by 'o' is: 22 in 0.039214 seconds  
Move made by '@' is: 17 in 322.558146 seconds  
Move made by 'o' is: 37 in 0.027461 seconds  
Move made by '@' is: 16 in 203.018304 seconds  
Move made by 'o' is: 18 in 0.016975 seconds
```

Move made by '@' is: 14 in 394.0543 seconds
Move made by 'o' is: 52 in 0.022718 seconds
Move made by '@' is: 21 in 116.192677 seconds
Move made by 'o' is: 13 in 0.003741 seconds
Move made by '@' is: 28 in 1.632288 seconds
Move made by 'o' is: 38 in 0.022249 seconds
Move made by '@' is: 85 in 27.482172 seconds
Move made by 'o' is: 33 in 0.017218 seconds
Move made by '@' is: 32 in 54.506912 seconds
Move made by 'o' is: 63 in 0.022889 seconds
Move made by '@' is: 41 in 60.070406 seconds
Move made by 'o' is: 61 in 0.016473 seconds
Move made by '@' is: 72 in 15.978771 seconds
Move made by 'o' is: 71 in 0.009956 seconds
Move made by '@' is: 53 in 2.923621 seconds
Move made by 'o' is: 62 in 0.011961 seconds
Move made by '@' is: 58 in 0.099534 seconds
Move made by 'o' is: 11 in 0.001702 seconds
Move made by '@' is: 83 in 0.006795 seconds
Move made by 'o' is: 68 in 0.002068 seconds
Move made by '@' is: 51 in 0.001461 seconds
Move made by 'o' is: 31 in 0.00073 seconds
Move made by '@' is: 81 in 0.000391 seconds
Move made by 'o' is: 42 in 0.000218 seconds

White wins!

Score for BLACK is: 13 and WHITE is: 51

Total time taken by Black(@) is: 64980.145969000005 seconds and average per move is: 2166.0048656333333

Total time taken by White(o) is: 1.2895659999999998 seconds and average per move is: 0.042985533333333326

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

Tejass-MBP-2:testtothello tejasmunees\$