

Program Design - Using Functions

① Mastermind

② Tic-Tac-Toe

R G B Y

1 black
2 white

Generate correct → easy random

Need in guess numBlack

figure out # black (guess, correct)

total (guess, correct)

FREQ ARRAY

	0	1	2	3	4	5
colors = B , R, G, B, Y, Bl, Wh						

Bl, Bl, G, Y freq =	1	1	1	1	0	0
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freq =	0	1	0	1	2	0
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total = 0

for i in range(len(COLORLIST)):

total += min(guess[i], correct[i])

main
 $\text{sol} \rightarrow \{ 'x', 'u', 'h', 'b', 'y' \}$
 $f(\text{sol})$

~~$f(\text{ans})$~~
 ~~ans~~
 ~~$\text{ans.append}()$~~

main
 $x \rightarrow 7$
 $f(x)$

$f(\text{myx})$
 $\text{myx} \rightarrow 8$
 $\text{myx} += 1$

Maskmind

freq $\{0\} \rightarrow R$
 freq $\{ "G" \} = 2$

Dictionary!

2 B1
 no B, Y, Wh
 R, G