

Option 1: Word Master Mind

This Java program will randomly select a word from a text file containing 50 four letter words. The user will have 10 guesses to try to determine the word. After each guess the computer will print an **X** for each letter in the correct location and an **O** for each correct letter in an incorrect location. If the user does not guess the word in 10 guesses the program should show the user the word.

Sample output (if the random word is **mind**)

Guess #1: **goat**

Result:

Guess #2: **swim**

Result: OO

Guess #3: **silk**

Result: X

Guess #4: **side**

Result: XO

Guess #5: **dine**

Result: XXO

Guess #6: **find**

Result: XXX

Guess #7: **mind**

Result: XXXX

CORRECT!!

Final Score = 66

Scoring Word Master Mind:

Guessing the word on the 1st guess = 100 points

 " 2nd guess = 90 "

 " 3rd guess = 80 "

Guessing the word on the 4th guess = 70 points
" 5th guess = 60 points
" 6th guess = 50 points
" 7th guess = 40 points
" 8th guess = 30 points
" 9th guess = 20 points
" 10th guess = 10 points

All **O's** are worth 1 point each and all **X's** are worth 2 points each. The value of all **O's** and **X's** should be added to the points earned for guessing the word.

If the word is not guessed the Final Score should equal just the value of all **O's** and **X's**. If this occurs the final two lines of output might look like this:

Guess #10: **sink**
Result: XXO Word = wins Final Score = 13

Make sure that many of the words in the file have double letters like pool or mill. Handling these words is the most challenging part of this project.

If you are working with a partner, you must also incorporate a Top Ten List into your project. If your Final Score is large enough to earn a spot in the Top Ten List, this must be displayed in your program and the person's name must be inserted into the correct position in the text file containing the top ten scores. This may require dropping the name in position 10. The program should also ask whether you would like to see the Top Ten List.