

Write the hangman game code

- Send the e-mail to “seongjun@korea.ac.kr” with e-mail title **Lab-2 Code 20223502xx**
- File name is recommended to be “**cydf207-20223502xx-lab2.py**” and it is attached to the e-mail

Hangman Game Overview

- The computer selects a word at random from the list of words in **words.txt**.
 - Reading **words.txt** and select a random word are done by **cydf207-20223502xx-lab2.py**
 - Note that **words.txt** contains words in all lowercase letters.
- The user is given a certain number (in this problem 10) of guesses at the beginning.
- The user inputs their guess, and the computer either:
 - reveals the letter if it exists in the secret word,
 - informs the user if their guess is invalid (i.e. longer than 1 character, not a small letter, or has already been guessed) and does not penalize,
 - penalizes the user and updates the number of guesses remaining if the guess is valid and does not exist in the secret word
 - reveals a letter if the user asks for help by ‘?’, and reduces the guess by three.
 - * informs the user if the user asks for help by ‘?’, if the number of remaining guesses is three or less than three
- The game ends when either the user guesses the secret word or the user runs out of guesses.
 - If the player wins, print a congratulatory message, and tell the player their score, where the score is determined as
$$\text{Score} = 4 \times (\text{guesses_remaining}) + 3 \times (\text{length of secret_word})$$
 - If the player runs out of guesses before completing the word, tell them they lost and reveal the word.

Test Case

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Welcome to Hangman !
Let's guess a 5 letter word.
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You currently have 10 guesses left.
Available letters: abcdefghijklmnopqrstuvwxyz
Please guess a letter:  e # e is the input
Good guess:  ____e
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You currently have 9 guesses left.
Available letters: abcd fghijklmnopqrstuvwxyz
Please guess a letter:  i
Sorry. That letter is not in my word :  ____e
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You currently have 8 guesses left.
Available letters: abcd fghijklmnopqrstuvwxyz
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Please guess a letter: 5
Nope. That is not a valid letter : ____e

You currently have 8 guesses left.
Available letters: abcd fghjklmnopqrstuvwxy z
Please guess a letter: what
Nope. That is not a valid letter : ____e

You currently have 8 guesses left.
Available letters: abcd fghjklmnopqrstuvwxy z
Please guess a letter: ?
Letter p is revealed : _pp_e

You currently have 5 guesses left.
Available letters: abcd fghjklmnoqrstuvwxy z
Please guess a letter:

:

Winning
You currently have 4 guesses left.
Available letters: bcd fghjklmnoqrstuvwxy z
Please guess a letter: l
Good guess: apple

Good Job! You won with score of 27. ($= 4 \times 3 + 3 \times 5$)

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Losing
You currently have 1 guess left.
Available letters: bcd fghjklmnoqrstuv
Please guess a letter: k
Ooops! Not enough guess left for : _pp_e

The secret word is 'apple'.