

CENG113

Programming Basics

HOMEWORK #4

Write a “Word Guessing Game” in Python. This is a game that one player thinks of a word or phrase and the other player tries to guess it by suggesting letters, within a certain number of guesses.

Before the game starts, first you should ask the name of the player. You should give the 6 guesses to the player. In this homework you will be given a list of words, your “Word Guessing Game” should randomly pick a word from the list. The list is given in the appendix of this homework.

When the game starts, your program should randomly select word from the list. The random word selection should be done with a function. The function should return the randomly selected word. After the word is selected, the guessing part of the game begins. Before the player start guessing, you should print the word’s length amount of dashes (“-” character).

For example, if the randomly selected word is “COMPUTER”,

you should print.

“-----”

To inform the player, after each guessing, you should print the remaining amount of guesses that are left. After each wrong guessing (guesses can either be a letter or the word itself) you will have to decrease the remaining amount of guesses. Also to avoid guessing the same wrong letter over and over, print the guessed letters (wrong and correct letters) and do not allow the player to re-enter the guessed letter.

For example,

Guesses: A, E, D, T

Remaining Guesses: 4

“-----T E -”

Do not forget to **modify your string** after every correct guess. (**HINT:** You can use lists to keep the indexes of letters and dashes of the word. Then modify it on a list. When the list is modified you can **concatenate** the letters in the list).

If the player is out of guesses. You should print a message

PLAYER_NAME + " You have lost"

To keep your program running, use a **while-statement** and after the end of each game you should ask the player "Do you want to play again?", if no the user will enter **quit** to exit the game and program.

In this homework you are expected to write 3 functions. Your functions shouldn't be lesser or more than 3 functions. The functions jobs are given below.

Function #1: Your first function is responsible of randomly selecting the words from list of words that is given in the appendix. Do not use a different list of words in your homework.

Function #2: Your second function is responsible of initializing the word with "-" (dashes). The initialize word has to be a word that is represented with a list.

Example: Word that will be guessed = COMPUTER

```
initialized_word = ['-','-','-','-','-','-','-']
```

This function will not return anything, but only initializing.

Function #3: Your third and last function is responsible of replacing the correct letters to its corresponding indexes in the list and word.

Example:

Guess = T

```
['-','-','-','-','-','T','-','-']
```

IMPORTANT! While you print your final form of the word after each guess, you should print the word as a **String**, you **cannot print** the last form of the word as a **List**!

APPENDIX

```
words = ['stack', 'queue', 'tree', 'linked list', 'software', 'hardware', 'operating systems', 'algorithm', 'computer', 'network']
```

Submission Rules:

1. You should submit your codes through CMS.
2. Your homework should be named as **HW4_StudentID.py**. Students who do NOT follow these rules **WILL BE GRADED AS 0**.
3. Use comments in your code, otherwise you will lose some points.
4. Write your Name, Surname and Student ID as a comment in your code