

HW2 : Due Mon Sep 23rd.

1. Download the python program called hangman.py and Rename it to hw2pr0_YOUR-NAME.py.
2. The file includes some ready code for you to start implementing your hangman game.
 - **Complete displayMan()**
 1. This function takes a parameter number of badGuesses and then it displays part of hangman based on this number. The function draws 8 shapes [from 0 to 7] that correspond to no hangman parts to complete hangman body.
 - **Incomplete function changeOne()**
 - ❖ This function takes input as follows
 - secret: a string word, e.g., "hello"
 - display: a string word of hyphens with the same length as secret e.g., "-----" if secret is "hello"
 - letter: any letter: e.g., 'i' or 'k'
 - start: integer index when the search in secret should start at.
 - ❖ You will complete the function code such that the function searches for the first position of the input letter in the string secret and then update the string display based on this position by replacing the corresponding hyphen with the input letter.
 - ❖ Examples

```
>>> changeOne("Hello", "-----", 'o', 0)
'-----o'

>>> changeOne("Hello", "-----", 'l', 0)
'--l--'

>>> changeOne("Hello", "-----", 'l', 2)
'--l--'

>>> changeOne("Hello", "-----", 'l', 3)
'---l-'
```
 - **Incomplete function change ()**
 - ❖ This function takes is the same like the changeOne() except that it has a recursive step to search for all occurrences of the letter in the string secret and replace all the corresponding positions in the string display.

❖ Examples

```
>>> change("Hello", "-----", 'o', 0)
'----o'
>>> change("Hello", "-----", 'l', 0)
'--ll--'
```

- **Incomplete function hangmanOnce()**

1. Generates a random English word (secret) and string (display) that hides all letters of the secret word by displaying hyphens instead.
2. Then it allows user to input a letter and searches for the letter in the secret word.
3. You will complete the function such that it does the following.
 1. If the letter exists in the secret word, the function changes the occurrences of this letter in the displayed word, otherwise the badGuesses increases by 1 and the hangman hanged head is displayed.
 2. Examples good guess.

```
>>> hangmanOnce()
Secret word: -----
Guess a letter: a
```

```

      ----|
      |
      |
      |
      ----
Secret word: ---a----
>>> |
```

3. Examples bad guess.

```
>>> hangmanOnce()
Secret word: -----
Guess a letter: i
```

```

      ----|
      |  o
      |
      |
      ----
Secret word: -----
>>> |
```

- **Incomplete function hangman ()**

1. This function is the same like the hangmanOnce except that it continues till the secret word is found or the hangman hanged.
2. Example of the loose runs on the right --- >
3. Example of the winner runs is as follows.

```
>>> hangman()
Secret word: -----
Guess a letter: g

  ----|
  |   o
  |
  |
  ----|
Secret word: -----
Guess a letter: b

  ----|
  |   o
  |
  |
  ----|
Secret word: b-----
Guess a letter: a

  ----|
  |   o
  |
  |
  ----|
Secret word: ba-a-a-
Guess a letter: n

  ----|
  |   o
  |
  |
  ----|
You win!
Secret word is: banana
>>> |
```

```
>>> hangman()
Secret word: -----
Guess a letter: y
```

```
  ----|
  |   o
  |
  |
  ----|
```

```
Secret word: -----
Guess a letter: p
```

```
  ----|
  |   o
  |   o
  |
  ----|
```

```
Secret word: -----
Guess a letter: k
```

```
  ----|
  |   o
  |   o
  |   o
  |
  ----|
```

```
Secret word: -----
Guess a letter: t
```

```
  ----|
  |   o
  |   o
  |   o
  |  /
  ----|
```

```
Secret word: -----
Guess a letter: r
```

```
  ----|
  |   o
  |   o
  |   o
  |  / \
  ----|
```

```
Secret word: -----
Guess a letter: k
```

```
  ----|
  |   o
  |  \o
  |   o
  |  / \
  ----|
```

```
Secret word: -----
Guess a letter: j
```

```
  ----|
  |   o
  |  \o/
  |   o
  |  / \
  ----|
```

```
You loose
Secret word is: banana
>>>
```

Hanged!!

3. Your role is to complete these functions to have the game ready to play.
4. Grades will be as follows
 - Complete and running changeOne() >> 25 points
 - Complete and running change () >> 25 points
 - Complete and running hangmanOnce() >> 25 points
 - Complete and running hangman () >> 25 points
5. Complete the four functions as indicated above and enjoy playing hangman game in your Idle.
6. Submit the hw2pr0_YOUR-NAME.py to Moodle