

# HANGMAN PROBLEM

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SLOT :L7+L8

## 1)Solve the Hangman Problem

```
import numpy as np

global word
word = "apple"
global word_list
#make the word as list
word_list = [char for char in word]
global answerlist
answerlist = np.full((1, len(word_list)), "_", dtype='<U1')
print(answerlist)

def no_empty(matrix):
    if "_" in answerlist:
        return False
    else:
        return True

global game
game=True
def start():
    guesses = 5
    length= len(word)
    print("length of the word is ",length)
    while (guesses>0):
        if game==False:
            break
        print("====No of Guesses is ",guesses,"====")
        character = input("Enter the guessed character : ")
        if character in word:
            for i in range(len(word)):
                if word[i]==character:
                    if answerlist[0][i]=="_":
                        answerlist[0][i]=word[i]
                        if no_empty(answerlist):
                            print("=====YOU WON THE GAME=====")
                            print(answerlist)
                            game_over=False
                            break
            else:
                pass
            print(answerlist)
        else:
            print("!! You have guessed the wrong character !!")
            guesses= guesses-1
    else:
        print("=====YOUR GUESSES ARE OVER=====")
start()
```

OUTPUT:

```
C:\Users\Pugazh Mukilan\Desktop\SEM - 4\Artificial Intelligence - F2\
llgence - F2\LAB\Hangman.py"
[['_ ' '_ ' '_ ' '_ ' '_ ']]
length of the word is 5
=====No of Guesses is 5=====
Enter the guessed character : D
!! You have guessed the wrong character !!
=====No of Guesses is 4=====
Enter the guessed character : A
!! You have guessed the wrong character !!
=====No of Guesses is 3=====
Enter the guessed character : a
[['a' '_ ' '_ ' '_ ' '_ ']]
=====No of Guesses is 3=====
Enter the guessed character : p
[['a' 'p' '_ ' '_ ' '_ ']]
[['a' 'p' 'p' '_ ' '_ ']]
=====No of Guesses is 3=====
Enter the guessed character :
=====No of Guesses is 3=====
Enter the guessed character : j
!! You have guessed the wrong character !!
=====No of Guesses is 2=====
Enter the guessed character : l
[['a' 'p' 'p' 'l' '_ ']]
=====No of Guesses is 2=====
Enter the guessed character : e
=====YOU WON THE GAME=====
[['a' 'p' 'p' 'l' 'e']]
=====No of Guesses is 2=====
```