

## Hangman Problem (word guessing )

```
import random
```

```
def hangman():
```

```
    word = random.choice(["python", "developer", "hangman", "algorithm",  
"variable", "function", "loop", "array", "object", "class", "inheritance", "compile", "debugging", "syntax", "framework", "database", "concurrency", "server", "interface", "pointer"])    guessed,  
incorrect, max_incorrect = set(), 0, 6
```

```
    while incorrect < max_incorrect:
```

```
        # Display the word with unguessed letters as underscores
```

```
display = " ".join([c if c in guessed else "_" for c in word])
```

```
    print(f"\nWord: {display}\nIncorrect guesses left: {max_incorrect - incorrect}")
```

```
    if "_" not in display: # Check if the word is fully guessed
```

```
print(f"\nCongratulations! You've guessed the word: {word}")    return
```

```
    guess = input("Guess a letter: ").lower()
```

```
    if guess in guessed:
```

```
        print("You already guessed that letter.")
```

```
elif guess in word:        guessed.add(guess)
```

```
else:
```

```
    guessed.add(guess)
```

```
incorrect += 1
```

```
    # If max_incorrect is reached, the player loses
```

```
print(f"\nSorry, you've run out of guesses. The word was: {word}")
```

```
# Start the game
```

```
print("Words : python,developer,hangman,algorithm,variable,function,loop,array,object ,class  
,inheritance,compile,debugging,syntax,framework,database,concurrency,server,interface,poin  
ter")
```

```
hangman()
```

OUTPUT:

Words : python,developer,hangman,algorithm,variable,function,loop,array,object ,class  
,inheritance,compile,debugging,syntax,framework,database,concurrency,server,interface,poin  
ter

Word: \_ \_ \_ \_ \_

Incorrect guesses left: 6

Guess a letter: v

Word: \_ \_ \_ \_ \_

Incorrect guesses left: 5

Guess a letter: f

Word: \_ \_ \_ \_ \_

Incorrect guesses left: 4

Guess a letter: d

Word: d \_ \_ \_ \_

Incorrect guesses left: 4

Guess a letter: a

Word: d a \_ a \_ \_

Incorrect guesses left: 4

Guess a letter: t

Word: d a t a \_ a \_ \_

Incorrect guesses left: 4

Guess a letter: a

You already guessed that letter.

Word: d a t a \_ a \_ \_

Incorrect guesses left: 4

Guess a letter: b

Word: d a t a b a \_ \_

Incorrect guesses left: 4

Guess a letter: s

Word: d a t a b a s \_

Incorrect guesses left: 4

Guess a letter: e

Word: d a t a b a s e

Incorrect guesses left: 4

Congratulations! You've guessed the word: database

=== Code Execution Successful ===