

## Hangman game

### Task 1:

#### Source code;

```
import random

def choose_word():
    words = ['python', 'hangman', 'guess', 'programming', 'computer']
    return random.choice(words)

def display_word(word, guessed_letters):
    displayed_word = ""
    for letter in word:
        if letter in guessed_letters:
            displayed_word += letter + ' '
        else:
            displayed_word += '_ '
    return displayed_word.strip()

def hangman():
    print("Welcome to Hangman!")
    print("Try to guess the word one letter at a time.")

    word = choose_word()
    guessed_letters = []
    incorrect_guesses = 0
    max_incorrect_guesses = 6 # Adjust this to change the maximum number of incorrect
    guesses allowed

    while incorrect_guesses < max_incorrect_guesses:
        print("\nWord:", display_word(word, guessed_letters))
        guess = input("Enter a letter: ").lower()

        if len(guess) != 1 or not guess.isalpha():
            print("Please enter a single letter.")
            continue

        if guess in guessed_letters:
            print("You already guessed that letter.")
```

```
        continue

    guessed_letters.append(guess)

    if guess in word:
        print("Good guess!")
    else:
        print("Incorrect guess.")
        incorrect_guesses += 1

    if all(letter in guessed_letters for letter in word):
        print("\nCongratulations! You guessed the word:", word)
        break

if incorrect_guesses == max_incorrect_guesses:
    print("\nSorry, you ran out of guesses. The word was:", word)

hangman()
```

Output;

Welcome to Hangman!  
Try to guess the word one letter at a time.

Word: \_ \_ \_ \_ \_  
Enter a letter: prashu  
Please enter a single letter.

Word: \_ \_ \_ \_ \_  
Enter a letter: r  
Incorrect guess.

Word: \_ \_ \_ \_ \_  
Enter a letter:

*PREPARED BY PRASANTH PEETHALA*