ASSIGNMENT_02

TASK_01

In [1]:
```
from random import randint

secret_number = randint(1, 50)
attempts_left = 5

while attempts_left > 0:
    try:
        guess = int(input("Guess the secret number (between 1 and 50): "))
        if guess < 1 or guess > 50:
            print("Please enter a number between 1 and 50.")
            continue  # Allow the user to try again without reducing their remainin
    except ValueError:
        print("Invalid input! Please enter a valid number.")
        continue  # Allow the user to try again without reducing their remaining at

    if guess == secret_number:
        print(f"Congratulations! You guessed the secret number {secret_number} corr
        break
    elif guess < secret_number:
        print(f"Try again! Your guess is too low. You have {attempts_left - 1} atte
    else:
        print(f"Try again! Your guess is too high. You have {attempts_left - 1} att

    attempts_left -= 1

if attempts_left == 0:
    print(f"Game Over! The secret number was {secret_number}. Better luck next time
```

```
Try again! Your guess is too high. You have 4 attempts left.
Try again! Your guess is too high. You have 3 attempts left.
Try again! Your guess is too high. You have 2 attempts left.
Try again! Your guess is too low. You have 1 attempts left.
Try again! Your guess is too high. You have 0 attempts left.
Game Over! The secret number was 24. Better luck next time!
```

TASK_02

PART(a)

In [3]:
```
def num_vowels(string):
  vowels = ['a','e','i','o','u']
  count = 0
  for char in string:
    if char in vowels:
      count += 1
  return count
```

```
print(num_vowels("Learning Python is fun and engaging."))
```

```
10
```

PART(B)

In [7]:
```
def hours_to_min(hours):

    minutes = hours * 60
    return minutes


hours_input = 2.5
minutes_output = hours_to_min(hours_input)
print(hours_input, "hours is equivalent to", minutes_output, "minutes.")
```

```
2.5 hours is equivalent to 150.0 minutes.
```

PART(C)

In [8]:
```
def table(number):
  for i in range(1,13):
    print(number, "x" ,i, "=" ,number*i,)

number =7
table(number)
```

```
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70
7 x 11 = 77
7 x 12 = 84
```

PART(D)

In [9]:
```
def eligibility(age, GPA):
  if age >= 18 and GPA >= 3.0:
    return True
  else:
    return False

# Calls with positional arguments
print(eligibility(30, 3.2))

# Call with keyword arguments
print(eligibility(GPA = 2.9, age = 40))
```

```
True
False
```