**PROJECT (20 MARKS)**

**Project: "Number Guessing Game"**

**Description:**

In this project, students will create a number guessing game where the player has to guess a number generated using the random function in Python. The random function generates a random number within a specified range (e.g., between 1 and 100). The game provides feedback to the player after each guess, indicating whether the guessed number is too high, too low, or correct. The player is given a limited number of attempts to guess the number, and the game ends when the player either guesses the number correctly or runs out of attempts

**Python Skills:**

* Random number generation using the random function
* Looping and conditional statements
* User input handling
* Incrementing a value in a variable

**Guidelines:**

1. Use the **random** module's **randint()** function to generate a random number within a specified range (e.g., between 1 and 100).
2. Initialize a variable to store the number of attempts allowed (e.g., 5).
3. Prompt the player to guess a number within the specified range.
4. Use a loop to iterate through the player's attempts until they either guess the number correctly or run out of attempts.
5. Within the loop, compare the player's guessed number with the randomly generated number.
6. If the guessed number is correct, display a congratulatory message and end the game.
7. If the guessed number is too high or too low, provide feedback to the player and decrement the number of attempts remaining.
8. Repeat steps 3-7 until the player guesses the number correctly or runs out of attempts.
9. If the player runs out of attempts without guessing the correct number, display a message indicating the end of the game and reveal the correct number.