**Number Guessing Game**

**Concepts learned:**

* **Loops (Iteration):** Repeatedly prompts the player for input until the correct guess is made.
* **Conditional statements (if-elif-else):** Used to compare the player's guess with the secret number and provide feedback.
* **Random number generation:** Utilizes random.randint() to generate a random number.
* **User input and type conversion:** Takes user input and converts it from a string to an integer.
* **Input validation:** Ensures the input is a valid number before proceeding.
* **Comparison operators:** Uses <, >, and == to compare the guessed number with the secret number.
* **Counters:** Keeps track of the number of attempts using a variable.

**Key Learning Outcomes:**

* **Iteration:** Uses a while loop to keep the game running until the correct number is guessed.
* **Conditional logic:** Teaches decision-making using if, elif, and else statements.
* **Random number generation:** Introduces randomness and how to generate random numbers within a range.
* **Input validation:** Ensures that user input is handled safely and appropriately.
* **Type conversion:** Shows how to convert strings to integers for comparison.
* **Comparison operators:** Helps students understand the use of comparison operators to evaluate conditions.
* **Counters and variables:** Teaches the concept of tracking attempts or other dynamic values using variables.