
🧩 Part 1: Random Number Generation

1. Generate a random integer between **1 and 100**.
2. Generate a random floating-point number between **0 and 1**.
3. Generate a random even number between **50 and 100**.
4. Print **5 random numbers** between **10 and 50** using a loop.
5. Create a list of 10 random integers between **1 and 100**, and print them all.

🧠 Part 2: Random Choices from Lists

1. Create a list of fruits and print a random fruit each time you run the program.
2. Randomly select **3 students** from a list of 10 names for a project.
3. Shuffle a list of numbers from **1 to 10** and print the shuffled result.
4. From a list of 20 numbers, select **5 random numbers without replacement**.
5. Create a color palette (`["red", "blue", "green", "yellow", "black", "white"]`) and randomly select a color.

🎮 Part 3: Simulation Tasks

1. 🎲 **Dice Roll Simulation**
   Simulate rolling a six-sided die **10 times** and print each result.
2. 🪙 **Coin Flip Simulation**
   Simulate flipping a coin **100 times** and count how many times it landed on **Heads** vs **Tails**.
3. 🎟️ **Lottery Number Generator**
   Generate **6 unique random numbers** between **1 and 49**.
4. 🔑 **Password Generator**
   Create a random 10-character password using:
   - Uppercase letters
   - Lowercase letters
   - Digits
   - Special symbols
5. 🎯 **Guess the Number Game**
   - The computer picks a random number between 1 and 50.
   - The user keeps guessing until they find it.
   - Print “Too High” or “Too Low” hints after each guess.

🧩 Part 4: Bonus Challenges

1. 🎭 **Random Sentence Generator**

   Create 3 lists — subjects, verbs, and objects — and randomly combine them to form funny sentences like:

   "*My cat eats pizza.*" or "*A monkey drives a car.*"

2. ⚔️ **Rock-Paper-Scissors Game**
   - Let the user choose Rock, Paper, or Scissors.
   - The computer makes a random choice.
   - Display who wins.
3. 🎲 **Dice Game Between Two Players**
   - Both players roll a die 5 times each.
   - Print each roll and determine the winner based on the total score.

📘 Submission Guidelines

- Use only Python's built-in `random` module.
- Write clean, commented code.
- Each question should be in a separate cell/file/function.
- Include meaningful print statements to display results.