

10 programming questions for practicing Python's random module:

1. Generating Random Numbers:

- Write a program that generates a random integer between 1 and 100.
- Write a program that generates a random floating-point number between 0 and 1.
- Write a program that generates a random number between 20 and 50, with a step of 3.

2. Selecting Random Elements:

- Write a program that selects a random character from a given string.
- Write a program that selects a random element from a list of colors.

3. Shuffling Elements:

- Write a program that shuffles a deck of cards (represented as a list of strings).
- Write a program that shuffles a list of numbers.

4. Simulations:

- Write a program that simulates flipping a coin 100 times and prints the number of heads and tails.
- Write a program that simulates rolling a six-sided die 50 times and prints the frequency of each number.

5. Games:

- Write a program that plays a simple guessing game where the user has to guess a randomly generated number.
- Write a program that plays rock-paper-scissors against the computer.

Additional Challenges:

- Write a program that generates a random password with a specified length and character set.
- Write a program that creates a random walk on a grid.
- Write a program that simulates a lottery draw.