

Problem Solving & Coding – Level I [Language Foundations] (Simulation)

Solve the following problems using computer with help of Python/C++/Java/C# language as means of communication.

Problem 1: Dice Rolling

Create a function named *rollDice* that simulates the rolling of three dice and returns "Yahoo" if all three dice are the same. Otherwise it should return "Try again".

Write a main function to demonstrate the function.

Problem 2: Dice Game

In this problem, we are interested to find out how many times 6 will appear if we roll a die for 10 times. Create a function named *rollDieFor6* that simulates the rolling of a die for 10 times and returns the number of times 6 appear in the outcome.

Write a main program that calls your function 10 times and display the number of times 6 appeared in each experiment.

Problem 3: Random Password

Create a function named *randomPassword* that generates a random password. The password should have a random length between 7 and 10 characters. Each character should be randomly selected from positions 33 to 126 in the ASCII table. Your function will not take any parameters. It will return the randomly generated password as its only result.

Write a main program that calls your function and displays the randomly generated password.