Credit Name: CSE 2nd Language Programming Credit
Assignment Name: #6 MathTutor Assignment

How has your program changed from planning to coding to now? Please explain?:
        Planning on this project I thought I would need to just make variables for the operators
(+, -, *, /) and put them on random, but now that I'm coding it I have to make random cases of
each operator and also add random num1 and num2 with the operator to ask a full question.

```java
Random random = new Random();

int num1, num2, answer;
char operator;
int correctAnswers = 0;
int totalQuestions = 5; // Number of math problems to generate

System.out.println("Welcome to Math Tutor!");

for (int i = 1; i <= totalQuestions; i++) {
    // Generate two random numbers between 1 and 10
    num1 = random.nextInt(10) + 1;
    num2 = random.nextInt(10) + 1;

    // Generate a random operator (+, -, *, /)
    int operatorChoice = random.nextInt(4);
    switch (operatorChoice) {
        case 0:
            operator = '+';
            answer = num1 + num2;
            break;
        case 1:
            operator = '-';
            answer = num1 - num2;
            break;
        case 2:
            operator = '*';
            answer = num1 * num2;
            break;
        default:
            operator = '/';
            answer = num1 / num2;
            break;
    }
}
```

First I go to set the base. I made a random variable basically to set four cases with random
numbers and operators and made sure every question is different to the user.

```java
            System.out.print("Question " + i + ": " + num1 + " " + operator + " " + num2 + " = ");
            int userAnswer = scanner.nextInt();

            // Check the user's answer
            if (userAnswer == answer) {
                System.out.println("Correct!");
                correctAnswers++;
            } else {
                System.out.println("Incorrect. The correct answer is: " + answer);
            }
        }

        // Display the final score
        System.out.println("Your score: " + correctAnswers + " out of " + totalQuestions);

        scanner.close();
    }
}
```

I will prompt the user to answer the following random questions assigned to them and the system will check if it's correct or incorrect and it'll prompt the user letting them know and display the final score of the questions (your score/out of the total questions).