



Instructions:

- 1- Create a folder with your full name on the desktop.
- 2- Create 3 Text Documents inside the folder and name them Q1, Q2 and Q3.
- 3- Save your codes inside the Text Documents.

Q1. Write a C++ program that prompts the user to enter two numbers and displays their product. After displaying the result, the program should ask the user whether they wish to repeat the operation. If the user enters 'Y' or 'y', the program should repeat; for any other input, the program should terminate. **Use do-while loop.**

Output example:

```
Enter first number: 5
Enter second number: 3
5 x 3 = 15
Do you want to continue?: y

Enter first number: 2
Enter second number: 8
2 x 8 = 16
Do you want to continue?: n
```

Q2. Write a C++ program to create a calculator that repeatedly performs calculations for any two numbers entered by the user and exits when the user chooses to stop using it.

Use do-while loop.

Output example:

```
Enter Number 1: 5
Enter number 2: 8
Enter operation sign: +
5 + 8 = 13
Press Y or y to do another operation or any other key to exit. Y

Enter Number 1: 4
Enter number 2: 8
Enter operation sign: *
4 * 8 = 32
Press Y or y to do another operation or any other key to exit. N
```



Q3. Write a C++ program that generates two random numbers between 5 and 10 and asks the user to enter their sum. If the entered sum is incorrect, the program should ask the user whether they want to try again. If the user enters Y or y, the program repeats; otherwise, it stops. If the entered sum is correct, display a “Congratulations” message and end the program.

Use a do-while loop.

Output example:

```
8 + 8 ? : 10  
Press Y or y to play again: Y  
9 + 9 ? : 20  
Press Y or y to play again: y  
9 + 5 ? : 14  
Congratulations!
```

Q4. Write a C++ program that counts all the even and odd numbers within a range specified by the user, calculates the sum of all numbers in the range, and separately calculates the sums of the even and odd numbers. Use while loop.

Output example:

```
Enter lowest: 5  
Enter highest: 60  
  
There are 28 odds and 28 even numbers.  
The sum of all is 1820, sum of even numbers is 924 and sum of odd numbers is 896
```