



Q1. Write a program that uses a **for loop** to print the first 10 positive integers (1, 2, 3, ..., 10) to the console.

Q1.1: Modify Q1 and print numbers from (10 to 1)

Q1.2. Modify Q1 & 1.1 and use (While loop)

Q2. Write a C++ program that uses a for loop to print the even numbers between 1 and 50.

Q2.5: Modify the Q2 and find how many even numbers between 1-50.

Q3. Write a C++ program that finds the sum of 10 random numbers (use for loop)

Q4. Write a C++ program that uses a for loop to ask a user to input 5 numbers and find the square of each number.

Q5. Write a C++ code that asks user to input 5 numbers and check the number is positive or negative. (Use while loop)

Q6. Create a C++ program that prompts the user to enter an integer and then calculates its factorial. (Example: $4! = 4*3*2*1$)

Q7. Write a C++ program that prompts the user to enter a number. Using a for loop, check if the number is prime or not and display “The number is Prime” or “The number is NOT Prime”.

Q7.5. **(H.W)** Modify Q7 and find how many prime numbers between 1 to 100.

Q8- Create a program that counts all the even and odd numbers between a range of two numbers inserted by user and find the sum of all of them.

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.



Q9. Create a calculator that repeats doing calculation for any two numbers of user inserts and will exit if user decided to not use it.

Use 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
```