

## Loop Assignment 02

### 1. Program 1:

Write a program to print all natural numbers within the range.  
Take range input from the user

Input:  
Lower limit: 10  
Upper limit: 15

Output:  
10,11,12,13,14,15

### 2. Program 2:

Write a program to print all even numbers within the range.  
Take range input from the user.

Input:  
Lower limit: 10  
Upper limit: 15

Output:  
10,12,14

### 3. Program 3:

Write a program to print the sum of natural numbers within the range.  
Take range input from the user.

Input:  
Lower limit: 1  
Upper limit: 10

Output: 55

#### 4. Program 4:

Write a program to print products of natural numbers within the range.  
Take range input from the user

Input:

Lower limit:1

Upper limit:10

Output:

3628800

#### 5. Program 5:

Write a program to find the frequency of a digit in a given integer.

Input:

1231100

Output:

Frequency of 1: 3

Frequency of 2: 1

Frequency of 3: 1

Frequency of 0: 2

#### 6. Program 6:

Write a program to find whether the entered number is palindrome or not

Input: Enter a number: 151

Output: 151 is a palindrome number

Input: Enter a number: 153

Output: 153 is not a palindrome number

**7. Program 7:**

Take a number input and check whether it is an automorphic number or not  
(automorphic number means: is a number  $n$  whose square ends in  $n$ )

Input: 5

Output: Yes it is an automorphic number

Input: 7

Output: No it is not an automorphic number

**8. Program 8:**

Take a number from the user and reverse it

Input: 123

Output: 321

**9. Program 9:**

Take a number input as a string and reverse it

Input: "123" // as string

Output: 321 // as int

**10. Program 10:**

Take a range from the user and reverse each digit within the range

Input:

lower limit 10

Upper limit 15

Output:

01 | 11 | 21 | 31 | 41 | 51 |

