Task-A

1. Initialize an array of 10 elements and print the array elements both in normal and reverse order.

For example,

Input: 12 32 43 1 54 53 15 64 3 13 Output: 13 3 64 15 53 54 1 43 32 12

2. Initialize an integer array of 10 elements and print how many numbers are odd and how many numbers are even.

For example,

Input: 12 32 43 1 54 53 15 64 3 13

Output:

6 odd numbers
4 even numbers

3. Write a function that takes TWO parameters to print all the odd numbers between a given ranges. Input the starting value of the range and ending value of the range. Then, send them as the parameters to your function.

For example,

Output:

Starting value: 12 Ending value: 23 13 15 17 19 21 23

4. Write a program to perform matrix addition between 3 matrices.

For example,

Input:

```
    12
    13
    14
    1
    2
    3
    101
    104
    107

    15
    16
    17
    4
    5
    6
    102
    105
    108

    18
    19
    20
    7
    8
    9
    103
    106
    109
```

Output:

114 119 124 121 126 131 128 3 138

5. Write a function to calculate factorial of a given integer number if that number is a prime number. If it is not, it will give an error.

For example,

Scenario 1

Input: 5
Output: 120
Scenario 2
Input: 4

Output: Error! Not a prime number.

Task-B

- 1. Find the average value of the elements of an array.
- 2. Find the minimum and maximum value of the elements of an array.
- 3. Take two strings as your first and last name, then concatenate the two strings together so that you can find your full name:

e.g. First name = "Mahfujur" and Lastname = "Rahman" output: Full name = "Mahfujur Rahman"

Task-C

- 1. Write a C/C++ program for splitting a string by a '-' (hyphen).
- 2. Write a C/C++ program for splitting a string by a ''(space).
- 3. Write a C/C++ program to detect keyword or not keyword.
- 4. Write a C/C++ program to find if the given input string is a valid identifier.
- 5. Write a C/C++ program to find whether the Given Input is Numeric Constant or Not.
- 6. Write a C/C++ program to find the Operators from the Given Input string c code.
- 7. Write a C/C++ program to determine whether the Given Input is Comment or Not.