# **Assignment 4**

- 1. Create a void function, take an integer then print it then call this method in main.
- 2. Create a function, take three integers then return the average as float value then call this method in main.
- 3. Create a function, take an integer then return true if this number is prime otherwise return false
- 4. Write a function to find a cube of a given number.

#### Input

```
Input any number: 5
```

#### **Output**

```
Cube of 5 = 125
```

5. Write a C program to input radius of circle from user and find diameter, circumference and area of the given circle using function.

### Input

```
Input radius: 10
```

#### **Output**

```
Diameter = 20 units
Circumference = 62.83 units
Area = 314.16 sq. units
```

6. Write a program to print all elements of an array using the function.

#### Input

```
Input elements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
```

#### Output

```
Array elements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
```

7. Write a program to find the sum of array elements using the function.

### Input

```
Input array elements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
```

### Output

```
Sum of array: 55
```

8. Write a program to find the maximum element in an array using the function.

#### Input

```
Elements in array: 5, 1, 6, 10, 2, 3, 6, 50, -7, 4
```

#### **Output**

```
Maximum element = 50
```

9. Write a program to read elements in two matrices and add elements of both matrices.

### Input

```
Input elements in 3x3 matrix1:
1 2 3
4 5 6
7 8 9
Input elements in 3x3 matrix2:
9 8 7
6 5 4
3 2 1
```

### Output

```
Sum of both matrix =
10 10 10
10 10 10
10 10 10
```

10. Write a program to read elements in a matrix and find the sum of main diagonal (major diagonal) elements of the matrix.

#### Input

```
Input array elements:
1 2 3
4 5 6
7 8 9
```

### **Output**

```
Sum of main diagonal elements = 15
```

11. Write a program to read elements in a matrix and find the sum of elements of each row of the matrix.

## Input

```
Input elements in array:
1 2 3
4 5 6
7 8 9
```

### **Output**

```
Sum of row 1 = 6
Sum of row 2 = 15
Sum of row 3 = 24
```