



## **SHEET 4 – Functions 1**

1. Write C++ program that uses a function that checks whether an integer is prime or not.

Sample Output:

Enter a positive integer: 23  
23 is a prime number.

2. Write C++ program that uses a function to display the factors of a given number.

Enter a positive integer: 60  
Factors of 60 are: 1 2 3 4 5 6 12 15 20 30 60

3. Write C++ program that uses a function to compute the Least Common Multiple (LCM) of two numbers entered by the user.

Enter two numbers: 12  
18  
LCM = 36

4. Write C++ program that uses a function that checks whether a positive integer is Armstrong or not. An integer is called an Armstrong number if the sum of cubes of its individual digit is equal to the number itself.

$153 = 1 * 1 * 1 + 5 * 5 * 5 + 3 * 3 * 3$  // 153 is an Armstrong number.  
12 is not equal to  $1 * 1 * 1 + 2 * 2 * 2$  // 12 is not an Armstrong number.

Sample Output:

Enter a positive integer: 371  
371 is an Armstrong number.

