

## **Exercise: Lecture – 6**

- 6.1 Write a Python program that prints the multiplication table of a given number n.
- 6.2 Write a Python program that calculates the factorial of a given number n. The factorial of a number is the product of all positive integers up to that number.
- 6.3 Write a Python program that prints all even numbers from 1 to a given number n.
- 6.4 Write a Python program that prints the numbers from 1 to 50. For multiples of 3, print "Fizz" instead of the number, and for multiples of 5, print "Buzz". For numbers which are multiples of both 3 and 5, print "FizzBuzz".
- 6.5 Write a Python program that takes a list of numbers and finds the largest number in the list using a loop.
- 6.6 Write a Python program that takes a list of ages as input and classifies each age into one of the following age groups:
  - Child:** 0-12 years
  - Teen:** 13-19 years
  - Adult:** 20-64 years
  - Senior:** 65 years and above

The program should then count and print the number of individuals in each age group.

### **Sample input**

Given the list of ages= [5, 17, 24, 13, 45, 67, 89, 15, 33, 12, 18, 64, 65, 70]

### **Sample Output:**

Children: 3

Teens: 4

Adults: 5

Seniors: 3