

## Assignment 2 — Collections & LINQ

### Part A: C# Collections

1. Create a class `Book` with properties: Id, Title, Author, Price. Add 10 books to a `List<Book>` and perform:

- a. Display all books ordered by Price (ascending).
- b. Display all books where Author name contains letter 'a'.
- c. Remove a book whose Id is given by user.

2. Using Dictionary<int, string>, store student roll numbers and names. Perform:

- a. Search and display student name if roll number is provided.
- b. Print all entries in alphabetical order of names.

### Part B: LINQ

5. Given a list of integers: { 10, 2, 30, 4, 55, 60, 7, 8 }:

- a. Find all even numbers using LINQ.
- b. Find max, min, average.
- c. Display numbers greater than 20 sorted descending.

6. Create a list of Employees (Id, Name, Dept, Salary). Using LINQ:

- a. Print names of employees from 'IT' department.
- b. Find employee with highest salary.
- c. Group employees by department.

7. Using LINQ, join two lists:

List1: Student(Id, Name)

List2: Marks(StudentId, Subject, Score)

Display: Student Name – Subject – Score.

8. Create a list of strings (city names). Using LINQ, return only names which start with 'P' and have length > 5.