

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.