Lab 9 (Spot)- Structures (31/10/25)

Q1. Matrix of Points — Distance and Centroid Calculation using Structures and Recursion

Problem Statement:
Define a structure Point with members x and y (float). Read n coordinate points into an array of structures. Write a recursive function to find the sum of all x and y coordinates separately. Use a user-defined function to calculate the centroid (average x, average y). Display the distance of each point from the centroid using loops.

Sample Input:
Enter number of points: 3
Enter coordinates (x y):
1 2
3 4
5 6

Sample Output:
Centroid = (3.00, 4.00)
Distance of each point from centroid:
Point 1: 2.83
Point 2: 0.00
Point 3: 2.83