

EC4070: Data Structures and Algorithms

Department of Computer Engineering, Faculty of Engineering

University of Jaffna

Prelab 1

1. Write a Java program that reads a list of integers from the user and prints the sum, average, maximum, and minimum values from the list. Use loops and basic input/output operations.
2. Write a Java program to demonstrate the use of classes and objects. Create a Book class with attributes like title, author, and price. Add methods to display book details. In the main method, create an array of Book objects and display their details.
3. Implement linear search in Java. Write a method that takes an array of integers and a target value, then returns the index of the target if found, or -1 if not.
4. Write a Java program that implements the insertion sort algorithm. The method should take an unsorted array and sort it in ascending order.

Guidelines:

Submit the code files in a zipped folder by naming as 2022EAAA_Prelab (AAA is your registration number)

No Plagiarism (Zero marks will be provided for plagiarism)

Late submissions will have penalty