



Lab Manual: 09

Lab Topic: File Handling

Course Code: CSE110 (Object Oriented Programming)

Course Instructor: Tanni Mittra, Senior Lecturer, CSE

Lab Objective

1. **Learn a** mechanism to handle File in Java program

Lab Activities:

Lab Problem 1:

Write a program to create a file named Lab08_01.txt if it does not exist. Append new data to it if it already exists. Write 100 integers created randomly into the file using text I/O. Integers are separated by a space.

Lab Problem 2:

Write a program to create a file named Lab08_02.dat if it does not exist. Append new data to it if it already exists. Write 100 integers created randomly into the file using binary I/O. Integers are separated by a space.

Lab Problem 3:

Write a program that reads lines of characters from a text file and writes each line as a UTF-8 string into a binary file.

Lab Problem 4:

Consider the following class diagram and convert the class diagram into corresponding Java code.

List
Index:int MaxSize:int Data:int[MaxSize]
+ List () + List (int MaxSize) + push(int data):void + pop(): void + display(): void + top:int

- a. Inside the no argument constructor set MaxSize attributes to 10 and initialize Index attributes to -1. Inside the second constructor set MaxSize variables by user provided value and also initialize Index attributes to -1.
- b. Inside the push method add a new item in the Data array and the index of the array will be handled by Index instance variables. Each time a new data is added and Index attributes will be incremented by 1.
- c. The pop method will remove one element of the array from last. Each time an element removed from element Index attribute will be decreased by one.
- d. The top method will return an element which is added at last in the list.
- e. The display method will display the list of the Data array

Write a program that creates five List objects and stores them in a file named Lab08_04.dat