## East West University

**Department of Computer Science and Engineering**

## A/2, Jahurul Islam Avenue, Jahurul Islam City, Aftabnagar, Dhaka

**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** mechanismto 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 |

1. 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.
2. 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.
3. 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.
4. The top method will return an element which is added at last in the list.
5. 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