Experiment No: 7

AIM: To demonstrate I/O from files.

Date:

CO mapped: CO-4

Objectives:

To showcase proficiency in reading data from and writing data to files in various formats using programming languages, demonstrating the ability to implement reliable and efficient file I/O operations, which are essential for tasks such as data storage, retrieval, and processing in software applications.

Background:

Java I/O (Input and Output) is used to process the input and produce the output. Java uses the concept of a stream to make I/O operations fast. The java.io package contains all the classes required for input and output operations.

Practical questions:

1. Write a program that removes all the occurrences of a specified string from a text file. For example, invoking java Practical7_1 John filename removes the string John from the specified file. Your program should read the string as an input.
2. Write a program that will count the number of characters, words, and lines in a file. Words are separated by whitespace characters. The file name should be passed as a command-line argument.
3. Write a program to create a file named Practical7.txt if it does not exist. Write 100 integers created randomly into the file. Integers are separated by spaces in the file. Read the data back from the file and display the data in increasing order.

Observations: Put Output of the program

Conclusion: (Sufficient space to be provided)

Quiz: (Sufficient space to be provided for the answers)

1. What is file input/output (I/O), and why is it important in software development?
2. What are the common modes for opening files, and how do they differ (e.g., read, write, append)?
3. Describe the concept of file streams and how they are used in file I/O operations.
4. Write short notes about I/O stream classes.

Suggested Reference:

1. https://www.tutorialspoint.com/java/
2. https://www.geeksforgeeks.org/
3. https://www.w3schools.com/java/
4. https://www.javatpoint.com/