Experiment No: 11

Aim:- Write a java program in which data is read from one file and should be written in another file line by line.

Software Used:- Eclipse

Theory:

File handling

Byte Stream

Character Stream

File IO Basics

File Operations

-Creating file

-Reading file(character, byte)

-Writing file(character, byte)

Accepting Input from Keyboard

• A stream represents flow of data from one place to other place. Input streams which are used to accept or receive data. Output streams are used to display or write data. Streams are represented as classes in java.io package**.**

• System.in:

This represents InputStream object, which by default represents standard input device that is keyboard**.**

• System.out:

This represents PrintStream object, which by default represents standard output device that is monitor.

• System.err:

This field also represents PrintStream object, whichbydefaurepresentsmonitor.System.out is used to display normal messages and results whereas System.err is used to display error messages.

To accept data from the keyboard:

Connect the keyboard to an input stream object. Here, we can use InputStreamReader that can read data from the keyboard.

• InputSteamReader obj = new InputStreamReader (System.in);

• Connect InputStreamReader to BufferReader, which is another input type of stream.

• We are using BufferedReader as it has got methods to read data properly, coming fromthe stream.

• BufferedReader br = new BufferedReader (obj);

• **The above two steps can be combined and rewritten in a single statement as:**

• BufferedReader br = new BufferedReader (new InputStreamReader (System.in));

Now, we can read the data coming from the keyboard using read () and readLine () methods available in BufferedReader class.

Accepting a Single Character from the Keyboard:

Create a BufferedReader class object (br).

Then read a single character from the keyboard using read() method as:

char ch = (char) br.read()

The read method reads a single character from the keyboard but it returns its ASCII number,which is an integer.

Since, this integer number cannot be stored into character type variable ch, we should convert it into char type by writing (char) before the method.

int data type is converted into char data type, converting one data type into another data type is called type casting.

Accepting a String from Keyboard:

Create a BufferedReader class object (br). Then read a string from the keyboard using readLine() method as: String str = br.readLine ();

readLine () method accepts a string from keyboard and returns the string into str.

In this case, casting is not needed since readLine () is taking a string and int n = Integer.parseInt (str);

Program Code:

Output:

Conclusion:

Question-

1) **What are Java Streams? Explain different types of Java Streams?**
2) **What is AWT?**
3) **What is Swing?**