

Aim : Create debug and run Java program based on read and write character from a file using input/output stream.

Theory:

Java I/O It is used to process the input and produce the output.

Java uses the concept of stream to make I/O operation fast. The Java.io package contains all the classes required for input and output operation.

In Java, 3 streams are created for us automatically. All these streams are attached with the console.

- ① System.out : Standard output stream
- ② System.in : Standard input stream
- ③ System.err : Standard error stream.

InputStream class

InputStream class is an abstract class. It is subclass all the representing an input stream of bytes.

Useful method of InputStream.

method	Description
① public abstract int read() throws IOException	Read the next byte of data from the input stream.
② public int available() throws IOException	Return an estimate of the number of bytes that can be read input stream.

OutputStream

OutputStream class is an abstract class. It is the superclass of all classes representing an output stream of bytes.

An output stream accepts output bytes and sends them to some sink.

Method

① description

① `public void write(int b)` throws `IOException` is used to write a byte to the current output stream.

② `public void write(byte[] b)` throws `IOException` is used to write an array of bytes to the current output stream.

Conclusion: Hence, we successfully create, debug and run Java program based on read and write character from a file using input/output stream.

Program :-

```
import java.io.*;

class FileCopy {
    public static void main (String args []) throws
        Exception {
        FileInputStream fin = new FileInputStream ("file1.txt");
        FileOutputStream fout = new FileOutputStream ("file2.txt");
        int i = 0;
        while ((i = fin.read()) != -1) {
            fout.write ((byte) i);
        }
        fin.close ();
    }
}
```


C:\Users\Public\Java>javac FileCopy.java

C:\Users\Public\Java>java FileCopy

C:\Users\Public\Java>

