**JAVA IO and File Stream**

**3 Streams for IO**

INPUT Stream

OUTPUT Stream

ERROR Stream

public class JavaIO {

public static void main(String args[])

{

System.out.println("Hello");

System.err.println("Error");

try {

int i=System.in.read();

System.out.println((char) i);

} catch (Exception e) {

e.printStackTrace();

}

}

}

**File Output Stream Printing a byte**

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

public class JavaIO {

public static void main(String args[])

{

try {

FileOutputStream fout= new FileOutputStream ("C:\\Users\\lab365\\Desktop\\Test.txt");

fout.write(65);

fout.close();

} catch (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

}

**File Output Stream Printing a String**

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

public class FileOutputStreamExample2 {

public static void main(String args[])

{

try {

FileOutputStream fout= new FileOutputStream ("C:\\Users\\lab365\\Desktop\\Test.txt");

String s="Hello World";

byte b[]=s.getBytes();

fout.write(b);

fout.close();

} catch (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

}

**File Input Stream to Read a byte**

mport java.io.\*;

public class FileInputStreamEx {

public static void main(String args[]) {

try {

FileInputStream fin = new FileInputStream("C:\\Users\\lab365\\Desktop\\Test.txt");

int i = fin.read();

System.out.println((char) i);

fin.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

**File Input Stream to Read a String**

import java.io.FileInputStream;

public class FileInputStreamEx2 {

public static void main(String args[]) {

try {

FileInputStream fin = new FileInputStream("C:\\Users\\lab365\\Desktop\\Test.txt");

int i = 0;

while((i=fin.read())!=-1){

System.out.print((char) i);

}

fin.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

**Serialization**

Student1.java

import java.io.Serializable;

public class Student1 implements Serializable {

int rollno;

public Student1(int r){

rollno=r;

}

// TODO Auto-generated method stub

}

Serialization.java

import java.io.FileOutputStream;

import java.io.ObjectOutputStream;

public class Serialization {

public static void main(String[] args) {

try {

Student1 s=new Student1(111);

FileOutputStream fout= new FileOutputStream ("C:\\Users\\lab365\\Desktop\\Test.txt");

ObjectOutputStream out=new ObjectOutputStream(fout);

out.writeObject(s);

out.close();

}

catch(Exception e)

{

e.printStackTrace();

}

// TODO Auto-generated method stub

}

}

**Deserilization**

Student1.java

import java.io.Serializable;

public class Student1 implements Serializable {

int rollno;

public Student1(int r){

rollno=r;

}

// TODO Auto-generated method stub

}

Deserilization.java

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

public class Deserialization {

public static void main(String[] args) {

// TODO Auto-generated method stub

try

{

FileInputStream fis= new FileInputStream ("C:\\Users\\lab365\\Desktop\\Test.txt");

ObjectInputStream ois=new ObjectInputStream(fis);

Student1 s=(Student1) ois.readObject();

System.out.println("Roll no is:"+s.rollno);

ois.close();

}

catch(Exception e)

{

e.printStackTrace();

}

// TODO Auto-generated method stub

}

}