//Buffered IO

import java.io.\*;

public class Demo {

    public static void main(String[] args)throws Exception {

        FileInputStream fin;

        fin=new FileInputStream("C:\\javatraining\\files\\test1.txt");

        BufferedInputStream bin;

        bin=new BufferedInputStream(fin);

        FileOutputStream fout;

        fout=new FileOutputStream("C:\\javatraining\\files\\test2.txt");

        BufferedOutputStream bout;

        bout=new BufferedOutputStream(fout);

        int x;

        System.out.println(fin.available());

        do{

            x=bin.read();

            if(x!=-1){

                bout.write(x);

            }

        }while(x!=-1);

        bin.close();

        bout.close();

        System.out.println("File Copied");

    }

}

// DataOutputStream

import java.io.\*;

public class Demo2 {

    public static void main(String[] args)throws Exception {

        FileOutputStream fout;

        fout=new FileOutputStream("C:\\javatraining\\files\\test3.txt");

        DataOutputStream dout;

        dout=new DataOutputStream(fout);

        dout.writeInt(102);

        dout.writeBoolean(true);

        dout.writeDouble(1.2);

       dout.close();

    }

}

//DataInputStream

import java.io.\*;

public class Demo3 {

    public static void main(String[] args)throws Exception {

      FileInputStream fin;

      fin=new FileInputStream("C:\\javatraining\\files\\test3.txt");

      DataInputStream din;

      din=new DataInputStream(fin);

      int x=din.readInt();

      boolean y=din.readBoolean();

      double z=din.readDouble();

        System.out.println(x);

        System.out.println(y);

        System.out.println(z);

      din.close();

    }

}

//ObjectOutputStream

import java.io.FileOutputStream;

import java.io.ObjectOutputStream;

import java.io.Serializable;

class Student implements Serializable {

    private int id;

    private String name;

    public int getId() {

        return id;

    }

    public void setId(int id) {

        this.id = id;

    }

    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }

}

public class Demo4 {

    public static void main(String[] args)throws Exception {

        Student st;

        st=new Student();

        st.setId(1123);

        st.setName("xyz");

        FileOutputStream fout;

        fout=new FileOutputStream("C:\\javatraining\\files\\studinfo.txt");

        ObjectOutputStream out;

        out=new ObjectOutputStream(fout);

        out.writeObject(st);

        out.close();

    }

}

//ObjectInputStream

import java.io.FileInputStream;

import java.io.FileOutputStream;

import java.io.ObjectInputStream;

import java.io.ObjectOutputStream;

import java.io.Serializable;

class Student implements Serializable {

    private int id;

    private String name;

    public int getId() {

        return id;

    }

    public void setId(int id) {

        this.id = id;

    }

    public String getName() {

        return name;

    }

    public void setName(String name) {

        this.name = name;

    }

}

public class Demo5 {

    public static void main(String[] args)throws Exception {

        FileInputStream fin;

        fin=new FileInputStream("C:\\javatraining\\files\\studinfo.txt");

     ObjectInputStream in;

     in=new ObjectInputStream(fin);

     Student st3=(Student) in.readObject();

     System.out.println(st3.getId());

     System.out.println(st3.getName());

    }

}