

```

/* Anjali Dinesh
S3 CSE AI
11 */
import java.util.*;
abstract class shape
{
    abstract void numberofsides();

}
class rectangle extends shape
{
    void numberofsides()
    {
        System.out.println("The numberof sides of rectangle is 4");
    }
}
class triangle extends shape
{
    void numberofsides()
    {
        System.out.println("The numberof sides of rectangle is 3");
    }
}
class hexagon extends shape
{
    void numberofsides()
    {
        System.out.println("The numberof sides of rectangle is 6");
    }
}
class main
{
    public static void main(String args[])
    {
        Scanner S= new Scanner(System.in);
        rectangle r=new rectangle();
        r.numberofsides();
        triangle t=new triangle();
        t.numberofsides();
        hexagon h=new hexagon();
        h.numberofsides();
        S.close();
    }
}

```

OUTPUT:

The numberof sides of rectangle is 4
The numberof sides of rectangle is 3
The numberof sides of rectangle is 6

```

/* Anjali Dinesh
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import java.util.*;
class line {
public static void main(String args[]) {
int n;
int sum = 0;
Scanner s1 = new Scanner(System.in);
System.out.println("Enter integers with one space gap:");
String str = s1.nextLine();
StringTokenizer st = new StringTokenizer(str, " ");
while (st.hasMoreTokens()) {
String temp = st.nextToken();
n = Integer.parseInt(temp);
System.out.println(n);
sum = sum + n;
}
System.out.println("Sum of the integers is: " + sum);
s1.close();
}
}

```

OUTPUT:

Enter integers with one space gap:

4 7 6 3

4

7

6

3

Sum of the integers is: 20

```

/* Anjali Dinesh
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import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
class file {
public static void main(String[] args)
{
try {
FileReader fr = new FileReader("gfgInput.txt");
FileWriter fw = new FileWriter("gfgOutput.txt");
String str = "";
int I;
while ((I = fr.read()) != -1) {
str += (char)I;
}
System.out.println(str);
fw.write(str);
fr.close();
fw.close();
System.out.println("File reading and writing both done");
}
catch (IOException e) {
System.out.println("There are some IOException.");
}
}
}

```

OUTPUT:

There are some IOException.

```
/* Anjali Dinesh  
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```

```
import java.io.*;  
import java.util.*;  
public class filehandling  
{  
    static void readfile(){  
        FileInputStream fin = null;  
        try{  
            fin = new FileInputStream("a.txt");  
            int getsiz=fin.available();  
            System.out.println("file size is "+getsiz);  
            int i=0;  
            while(i<getsiz){  
                System.out.println(fin.read());  
                i++;  
            }  
        }  
        catch(Exception e){  
            System.out.println("error");  
        }  
        finally  
        {  
            try  
            {  
                if (fin != null)  
                {  
                    fin.close();  
                }  
            } catch (IOException e)  
            {  
                System.out.println("Error closing file:" + e.getMessage());  
            }  
        }  
    }  
    static void writefile(){  
        Scanner s=new Scanner(System.in);  
        FileOutputStream fos = null;  
        try  
        {  
            fos = new FileOutputStream("a.txt");  
            String str="";
```

```

System.out.println("Enter the File Input:");
str=s.nextLine();
fos.write(str.getBytes());
}
catch(Exception e)
{
System.out.println("error"+e);
}
finally
{
try
{
if (fos != null)
{
fos.close();
}
} catch (IOException ex)
{
System.out.println("Error closing file:" + ex.getMessage());
}
}
}
public static void main(String args[])
{
int k=0;
Scanner s = new Scanner(System.in);
while (k<2) {
System.out.println("MENU");
System.out.println("1. WRITE");
System.out.println("2.READ");
System.out.println("3.EXIT");
k=s.nextInt();
if (k==1) {
writefile();
}
else if (k==2) {
readfile();
}
}
}
}
}

```

OUTPUT:

MENU

1. WRITE

2.READ

3.EXIT

1

Enter the File Input:

Good Morning

MENU

1. WRITE

2.READ

3.EXIT

2

file size is 12

71

111

111

100

32

77

111

114

110

105

110

103

```
/* Anjali Dinesh
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11 */

class main
{
public static void main (String args[]) {
try
{
System.out.println ("Try Block");
int a = 125 / 5;
System.out.println ("Result:" +a);
}
catch (NullPointerException e) {
System.out.println ("Catch Block");
System.out.println (e);
}
finally {
System.out.println (" Finally Block");
System.out.println ("No Exception:Finally block executed");
}
System.out.println ("Rest of the code...");
}
}
```

OUTPUT:

```
Try Block
Result:25
Finally Block
No Exception:Finally block executed
Rest of the code...
```

```

/* Anjali Dinesh
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import java.util.Scanner;
class Employee {
    String name;
    int age;
    String phoneNumber;
    String address;
    double salary;
    void printSalary() {
        System.out.println("Salary: " + salary);
    }
}
class Officer extends Employee {
    String specialization;

    Officer(String name, int age, String phoneNumber, String address, double salary, String
specialization) {
        this.name = name;
        this.age = age;
        this.phoneNumber = phoneNumber;
        this.address = address;
        this.salary = salary;
        this.specialization = specialization;
    }
}
class Manager extends Employee
{
    String department;

    Manager(String name, int age, String phoneNumber, String address, double salary, String
department) {
        this.name = name;
        this.age = age;
        this.phoneNumber = phoneNumber;
        this.address = address;
        this.salary = salary;
        this.department = department;
    }
}
class EmployeeDet {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter Officer details:");
        System.out.print("Name: ");
        String officerName = scanner.nextLine();
        System.out.print("Age: ");
        int officerAge = scanner.nextInt();
        scanner.nextLine();
        System.out.print("Phone Number: ");
        String officerPhoneNumber = scanner.nextLine();
    }
}

```



```

        System.out.print("Address: ");
        String officerAddress = scanner.nextLine();
        System.out.print("Salary: ");
        double officerSalary = scanner.nextDouble();
        scanner.nextLine();
        System.out.print("Specialization: ");
        String officerSpecialization = scanner.nextLine();
        Officer officer = new Officer(officerName, officerAge, officerPhoneNumber, officerAddress,
officerSalary, officerSpecialization);
        System.out.println("\nEnter Manager details:");
        System.out.print("Name: ");
        String managerName = scanner.nextLine();
        System.out.print("Age: ");
        int managerAge = scanner.nextInt();
        scanner.nextLine();
        System.out.print("Phone Number: ");
        String managerPhoneNumber = scanner.nextLine();
        System.out.print("Address: ");
        String managerAddress = scanner.nextLine();
        System.out.print("Salary: ");
        double managerSalary = scanner.nextDouble();
        scanner.nextLine();
        System.out.print("Department: ");
        String managerDepartment = scanner.nextLine();
        Manager manager = new Manager(managerName, managerAge, managerPhoneNumber,
managerAddress, managerSalary, managerDepartment);
        System.out.println("\nOfficer Details:");
        System.out.println("Name: " + officer.name);
        System.out.println("Age: " + officer.age);
        System.out.println("Phone Number: " + officer.phoneNumber);
        System.out.println("Address: " + officer.address);
        officer.printSalary();
        System.out.println("Specialization: " + officer.specialization);
        System.out.println("\nManager Details:");
        System.out.println("Name: " + manager.name);
        System.out.println("Age: " + manager.age);
        System.out.println("Phone Number: " + manager.phoneNumber);
        System.out.println("Address: " + manager.address);
        manager.printSalary();
        System.out.println("Department: " + manager.department);
        scanner.close();
    }
}

```

OUTPUT:

Enter Officer details:

Name: Anna

Age: 24

Phone Number: 9032348723

Address: chungath house

Salary: 50000

Specialization: AI

Enter Manager details:

Name: Sooraj

Age: 30

Phone Number: 53489053380

Address: Mavila(H)

Salary: 80000

Department: AI

Officer Details:

Name: Anna

Age: 24

Phone Number: 9032348723

Address: chungath house

Salary: 50000.0

Specialization: AI

Manager Details:

Name: Sooraj

Age: 30

Phone Number: 53489053380

Address: Mavila(H)

Salary: 80000.0

Department: AI