


EXPERIMENT NO. 12C
PROGRAM TO MODIFY CONTENT OF FILE USING FILE WRITER CLASS

```
import java.io.FileWriter;
import java.io.IOException;
class Demo2
{
    public static void main(String[] args)
    {
        try
        {
            FileWriter f1= new FileWriter("Girija01.txt");
            f1.write("Name: Girija Ambardekar Address: Ratnagiri Education: SE EXTC");
            f1.close();
            System.out.println("Successfully wrote to the file.");
        }
        catch(IOException e)
        {
            System.out.println("An error occurred");
            e.toString();
        }
    }
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Demo2.java
student@cse15:~/Girija_Ambardekar/Java$ java Demo2
Successfully wrote to the file.
student@cse15:~/Girija_Ambardekar/Java$
```



EXPERIMENT NO 7 B

PROGRAM TO ACCEPT MARKS FROM STUDENTS AND DECLARING PASS OR FAIL

```
import java.util.*;
public class PassFail
{
    public static void main(String[] args)
    {
        int marks;
        System.out.println("Enter score: ");
        Scanner sc=new Scanner(System.in);
        marks=sc.nextInt();
        if(marks>40)
        {
            System.out.println("You are Pass!");
        }
        else {
            System.out.println("You are fail.");
        }
    }
}
```

OUTPUT

```
PS D:\Girija_Ambardekar> javac PassFail.java
PS D:\Girija_Ambardekar> java PassFail
Enter score:
45
You are Pass!
PS D:\Girija_Ambardekar>
```

EXPERIMENT NO.9(C)

PROGRAM

```
public class test2
{
    public static void main(String args[])
    {
        String s="C++ and Java";
        System.out.println("Length of String="+s.length());
        System.out.println("String in Uppercase="+s.toUpperCase());
        System.out.println("String in Lowercase="+s.toLowerCase());
        System.out.println(s.trim());
        System.out.println("Character at 6th location="+s.charAt(6));
        System.out.println(s.concat("languages"));
        System.out.println(s.replace("Java","Advanced Java"));
        System.out.println(s.substring(3,7));
        System.out.println(s.indexOf('a'));
    }
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac test2.java
student@cse15:~/Girija_Ambardekar/Java$ java test2
Length of String=12
```

String in Uppercase=C++ AND JAVA

String in Lowercase=c++ and java

C++ and Java

Character at 6th location=d

EXPERIMENT NO 08 C
PROGRAM TO CALCULATE VOLUME OF BOX USING CONSTRUCTOR
OVERLOADING

```
class Box
{
double width,height,depth;
Box()
{
width=height=depth=0;
}
Box(double l)
{
width=height=depth=l;
}
Box(double w,double h,double d)
{
width=w;
height=h;
depth=d;
}
double volume()
{
return width*height*depth;
}
}
class Volume
{
public static void main(String[] args)
{
Box b1=new Box();
Box b2=new Box(6);
Box b3=new Box(3,6,4);
System.out.println("Volume of first box="+b1.volume());
System.out.println("Volume of second box="+b2.volume());
System.out.println("Volume of third box="+b3.volume());
}
}
```

OUTPUT:


```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Volume.java
student@cse15:~/Girija_Ambardekar/Java$ java Volume
Volume of first box=0.0
Volume of second box=216.0
Volume of third box=72.0
student@cse15:~/Girija_Ambardekar/Java$
```

EXPERIMENT NO. 10A
PROGRAM TO DEMONSTRATE THE CONCEPT OF SINGLE INHERITANCE

```
class Employee
{
    float salary=40000;
}
class Programmer extends Employee
{
    int bonus=10000;
}
public static void main(String[] args)
{
    Programmer p1= new Programmer();
    System.out.println("Programmer salary is:"+p1.salary);
    System.out.println("Bonus of programmeris:"+p1.bonus);
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Programmer.java
student@cse15:~/Girija_Ambardekar/Java$ java Programmer
Programmer salary is:40000.0
Bonus of programmeris:10000
student@cse15:~/Girija_Ambardekar/Java$
```



EXPERIMENT NO. 12A

PROGRAM TO PRINT THE EXCEPTION INFORMATION USING TOSTRING() METHOD

```
class Demo
{
    public static void main(String[] args)
    {
        int a=5;
        int b=0;
        try
        {
            System.out.println(a/b);
        }
        catch(ArithmeticException e)
        {
            System.out.println(e.toString());
        }
    }
}
```

OUTPUT

```
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Demo.java
student@cse15:~/Girija_Ambardekar/Java$ java Demo
java.lang.ArithmeticException: / by zero
student@cse15:~/Girija_Ambardekar/Java$
```

EXPERIMENT NO. 11A

JAVA PROGRAM TO DEMONSTRATE CONCEPT OF ABSTRACT CLASS

```
abstract class shape
{
    abstract void draw();
}
class circle extends shape
{
    void draw()
    {
        System.out.println("Drawing circle.");
    }
}
class rectangle extends shape
{
    void draw()
    {
        System.out.println("Drawing rectangle.");
    }
}
class test
{
    public static void main(String[] args)
    {
        shape s1= new circle();
        s1.draw();
        shape s2= new rectangle();
        s2.draw();
    }
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac test.java
student@cse15:~/Girija_Ambardekar/Java$ java test
Drawing circle.
Drawing rectangle.
student@cse15:~/Girija_Ambardekar/Java$
```

EXPERIMENT NO. 11B PROGRAM TO CALCULATE AREA OF SQUARE AND CIRCLE BY USING INTERFACE

```
interface Area
{
    abstract void display();
}
class Square implements Area
{
    public void display()
    {
        int side=5;
        int area=side*side;
        System.out.println("Area of Square="+area);
    }
}
class Circle implements Area
{
    public void display()
    {
        int r=23;
        float area=3.14f*r*r;
        System.out.println("Area of circle="+area);
    }
}
class Test1
{
    public static void main(String[] args)
    {
        Area d1= new Square();
        d1.display();
        Area d2= new Circle();
        d2.display();
    }
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Test1.java
student@cse15:~/Girija_Ambardekar/Java$ java Test1
Area of Square=25
Area of circle=1661.06
student@cse15:~/Girija_Ambardekar/Java$
```


EXPERIMENT NO. 12B

JAVA PROGRAM TO USE METHODS OF FILE CLASS

```
import java.io.File;
import java.io.IOException;
class Demo1
{
    public static void main(String[] args)
    {
        try
        {
            File f1 = new File("Girija01.txt");
            if (f1.createNewFile())
            {
                System.out.println("File created:"+f1.getName());
                System.out.println("Is file readable:"+f1.canRead());
                System.out.println("Is file writeable:"+f1.canWrite());
                System.out.println("Path of file:"+f1.getAbsolutePath());
                System.out.println("File size:"+f1.length());
            }
            else {
                System.out.println("File already exists.");
            }
        }
        catch(IOException e)
        {
            System.out.println("An error occurred");
            e.toString();
        }
    }
}
```

OUTPUT

```
student@cse15:~$ cd Girija_Ambardekar
student@cse15:~/Girija_Ambardekar$ cd Java
student@cse15:~/Girija_Ambardekar/Java$ javac Demo1.java
student@cse15:~/Girija_Ambardekar/Java$ java Demo1
File created:Girija01.txt
Is file readable:true
Is file writeable:true
Path of file: /home/student/Girija_Ambardekar/Java/Girija01.txt
File size:0
student@cse15:~/Girija_Ambardekar/Java$
```