**EXPERIMENT NO.:**

**DATE:**

**AIM:** To construct a java program that illustrate the use of super.

**PROGRAM:**

class Animal

{

String colour="white";

String food="grass";

Animal(String f)

{

food=f;

System.out.println("Animal eating:"+food);

}

}

class Dog extends Animal

{

String colour="black";

String food="mutton";

Dog(String s)

{

super(s);

food=s;

System.out.println("Dog eating:"+food);

}

void display()

{

System.out.println("Animal colour is:"+super.colour);

}

}

class SuperDemo

{

public static void main(String args[])

{

Dog d=new Dog("grass");

System.out.println("Dog colour is:"+d.colour);

d.display();

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To develop a java program that uses an abstract class to find areas of different shapes.

**PROGRAM:**

import java.util.\*;

abstract class CalcArea

{

abstract void findRectangle(double l,double b);

abstract void findSquare(double s);

abstract void findCircle(double r);

}

class FindArea extends CalcArea

{

void findRectangle(double l,double b);

{

double area=l\*b;

System.out.println("Area of Rectangle:"+area);

}

void findSquare(double s)

{

double area=s\*s;

System.out.println("Area of Square:"+area);

}

void findCircle(double r)

{

double area=3.14\*r\*r;

System.out.println("Area of Circle:"+area);

}

}

public class Area

{

public static void main(String args[])

{

double l,b,r,s;

FindArea area=new FindArea();

Scanner get=new Scanner(System.in);

System.out.println("Enter Length and Breadth of Rectangle:");

l=get.nextDouble();

b=get.nextDouble();

area.findRectangle(l,b);

System.out.println("Enter side of a Square:");

s=get.nextDouble();

area.findSquare(s);

System.out.println("Enter radius of a Circle:");

r=get.nextDouble();

area.findCircle(r);

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To develop a java program to demonstrate the use of interface.

**PROGRAM:**

interface Bike

{

void run();

}

class Honda implements Bike

{

public void run()

{

System.out.println("Honda Bike is running");

}

}

class InterfaceDemo

{

public static void main(String args[])

{

Honda h=new Honda();

h.run();

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To create an user-defined package.

**PROGRAM:**

package pack;

public class A

{

Public void main

{

System.out.println(“This is first-package”);

}

}

package mypack;

import pack.\*;

class B

{

Public static void main(String args[])

{

A obj=new A();

Obj.display();

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To develop a java program to demonstrate exception handling mechanism using try,catch.Use multiple catch classes.

**PROGRAM:**

import java.util.\*;

public class ExceptionDemo

{

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

int a,b,index,res;

int arr[]=new int[5];

String s=null;

System.out.println(“Enter a,b values:”);

a=sc.nextInt();

b=sc.nextInt();

System.out,println(“Enter index to store result:”);

index=sc.nextInt();

try

{

res=a/b;

arr[index]=res;

}

catch(Arithmetic Exception e)

{

System.out.println(e);

}

catch (ArrayIndexOutOfBoundException ar)

{

System.out.println(ar);

}

System.out.println(“Program Demo”);

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To construct a java program for instance the use of throw.

**PROGRAM:**

import java.util.Scanner;  
class MyException extends Exception  
{  
  MyException(String msg)  
  {  
    super(msg);  
    }  
 }  
public class ThrowExample  
{  
  public static void main(String[] args)  
  {  
    int balance=50000;  
    int transfer;  
    Scanner sc=new Scanner(System.in);  
    System.out.println("Enter amount to be transferred:");  
    transfer=sc.nextInt( );  
    balance=balance-transfer;  
    try  
    {  
     if(balance<0)  
     throw new MyException("invalid amount");  
    }  
    catch(MyException m)  
    {  
      System.out.println(m);  
      balance=balance+transfer;  
     }  
      finally  
      {  
       System.out.println("In finally,Available balance is:"+balance);  
      }  
    }  
  }

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To construct a java program to illustrate the use of finally.

**PROGRAM:**

class FinallyExample

{

public static void main(String args[])

{

try

{

int data=25/5;

System.out.println(data);

}

catch(ArithematicException e)

{

System.out.println(e);

}

finally

{

System.out.println(“Finally block always executed”);

}

System.out.println(“reset of the code…”);

}

}

**RESULT:**

**EXPERIMENT NO.:**

**DATE:**

**AIM:** To construct a java program for demonstrating the creation and use of throws keyword.

**PROGRAM:**

public class ThrowsExample

{

public static void main(String args[])

{

ThrowsExample obj=new ThrowsExample();

try

{

obj.m1();

}

catch(Exception e)

{

System.out.println(“Exception caught”+e);

}

finally

{

obj=null;

System.gc();

}

}

void m1() throws Exception

{

m2();

}

void m2() throws Exception

{

throw new Exception();

}

}

**RESULT:**