1.PERSON DETAILS PROGRAM:

class Person {

private String name;

private int age;

public void setName(String name) {

this.name=name;

}

public String getName() {

return name;

}

public void setAge(int age) {

this.age=age;

}

public int getAge() {

return age;

}

}

public class Main

{

public static void main(String[] args) {

Person person=new Person();

person.setName("Alice");

person.setAge(30);

System.out.println(person.getName()+ " is "+ person.getAge()+" years old");

}

}

// 2.area of circle program

import java.util.Scanner;

public class CircleArea {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Input radius

System.out.print("Enter the radius of the circle: ");

double radius = scanner.nextDouble();

// Calculate area

double area = Math.PI \* radius \* radius;

// Output result

System.out.println("The area of the circle is: " + area);

scanner.close();

}

}

// 3.STUDENT DETAILS PROGRAM

Class A{

String name=”Akshaya”;

int rollno=15;

String dept=”AI &DS”;

Char sec=’A’;

Void Student\_details()

{

String C=”Name: “ +name + “ “ +”rollno” + “Dept” + “ “ +dept + “Section: “+ “ “+ sec;

System.out.println(“The student details :”);

public class Student{

public statis void main(Strings[] args){

A obj= new A();

Obj.Student\_detail():

}

//4.EXAMPLE PROGRAM FOR METHOD OVERLOADING:

**package** akshaya;

**public** **class** aksh

{

**int** a;

String name ,S;

**void** set(**int** a)

{

**this**.a=a;

System.***out***.println("The value of a is " +a);

}

**void** set(**int** a, String name)

{

**this**.a=a;

**this**.name=name;

System.***out***.println("The value of a is " + a + "name is " + name);

}

**void** set(String name,String S)

{

**this**.name=name;

**this**.S=S;

System.***out***.println("The value of name "+ name + S);

}

**public** **static** **void** main(String[] args)

{

aksh obj=**new** aksh();

obj.set("Same","Vel");

obj.set(9,"Vel");

obj.set(8);

}

}

//OUTPUT:

The value of name SameVel

The value of a is 9name is Vel

The value of a is 8

5.RUN TIME POLYMORPHISM:

class B {

public void get() {

System.out.println("This is super class");

}

}

class C extends B {

@Override

public void get() {

System.out.println("This is subclass");

}

}

public class Main {

public static void main(String[] args) {

C obj = new C();

obj.get();

}

}

//OUTPUT:

This is subclass

6.

**class B {**

**public void get() {**

**System.out.println("This is super class");**

**}**

**}**

**class C extends B {**

**@Override**

**public void get() {**

**System.out.println("This is subclass");**

**}**

**}**

**public class Main {**

**public static void main(String[] args) {**

**B obj = new C();**

**obj.get();**

**}**

**}**

**//OUTPUT:**

**This is subclass**