INHERITANCE 5 PROGRAMS:

1)CREATING BANKACCOUNT:

PROGRAM:

```
import java.util.Scanner;
class bank
{
   public int deposit, withdraw,balance;
   public String name;

   public bank()
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter deposit money");
      deposit=sc.nextInt();
      balance=deposit;
   }
}
class savingsbank extends bank
{
   public savingsbank()
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter name ");
      name=sc.nextLine();
```

```
        System.out.print("enetr withdrawal money");
        withdraw=sc.nextInt();



    }
}
public class main
{
public static void main(String args[])
{
    bank bm =new bank();
    savingsbank sa=new savingsbank();
    System.out.println("account holder name :"+sa.name);
    System.out.println("deposited money :"+bm.deposit);
    System.out.print("total money after withdrawl");
    bm.balance=bm.balance-sa.withdraw;
    System.out.print(bm.balance);


}
}
```

OUTPUT:

```
enter deposit money
1200
enter deposit money
1200
enter name
SAI
enetr withdrawal money100
account holder name :SAI
deposited money :1200
total money after withdrawl1100
```

2)CREATING A CLASS VEHICLE

PROGRAM:

```
import java.util.Scanner;
class vehical
{
   public String fule_type,make,model;
   public int year,speed,fule_capacity;
   public double mileage,distance,fule_consumed;
}
class truck extends vehical
{
   public int  number_of_wheels,capacity;
   public truck()
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter the model of truck");
```

```
        model=sc.nextLine();
        System.out.println("enter the fule type of truck");
        fule_type=sc.nextLine();
        System.out.println("enter the make of truck :");
        make=sc.nextLine();
        System.out.println("enter the speed of truck");
        speed=sc.nextInt();
        System.out.println("enter diastance traveled by truck :");
        distance=sc.nextInt();
        System.out.println("fule capacity of truck");
        fule_capacity=sc.nextInt();

       mileage = (double) distance / fule_consumed;
    }
}
public class test
{
    public static void main(String args[])
    {
        truck t=new truck();
        System.out.println("truck model :"+t.model);
        System.out.println("truck make :"+t.make);
        System.out.println("fule type :"+t.fule_type);
        System.out.println("speed of truck :"+t.speed);
```

```
        System.out.println("fule capacity of truck is :"+t.fule_capacity);
        System.out.println("distance travelled by truck :"+t.distance);
        System.out.println("millage of truck is :"+t.mileage);
    }
}
```

OUTPUT:

```
enter the model of truck
22
enter the fule type of truck
diesel
enter the make of truck :
steel
enter the speed of truck
250
enter diastance traveled by truck :
50
fule capacity of truck
30
truck model :22
truck make :steel
fule type :diesel
speed of truck :250
fule capacity of truck is :30
distance travelled by truck :50.0
millage of truck is :Infinity
```

3)creating a class shape to find the area .

Program:

```
import java.util.Scanner;
class shape
```

```
{
   public double area,perimeter;
   public double pi,radius;
}
class circle extends shape
{
   public circle()
   {
      Scanner sc=new Scanner(System.in);
      System.out.println("enter radius of circle :");
      radius = sc.nextDouble();
      if(radius>=0)
      {
      pi=3.14;
      area=pi*radius*radius;
      }
   }
}
public class test
{
   public static void main(String args[])
   {
      circle s=new circle();
      System.out.println("Area of circle is :"+s.area);
```

```
    }
}
```

Output:

```
enter radius of circle :
5
Area of circle is :78.5
```

4)create the class using employee

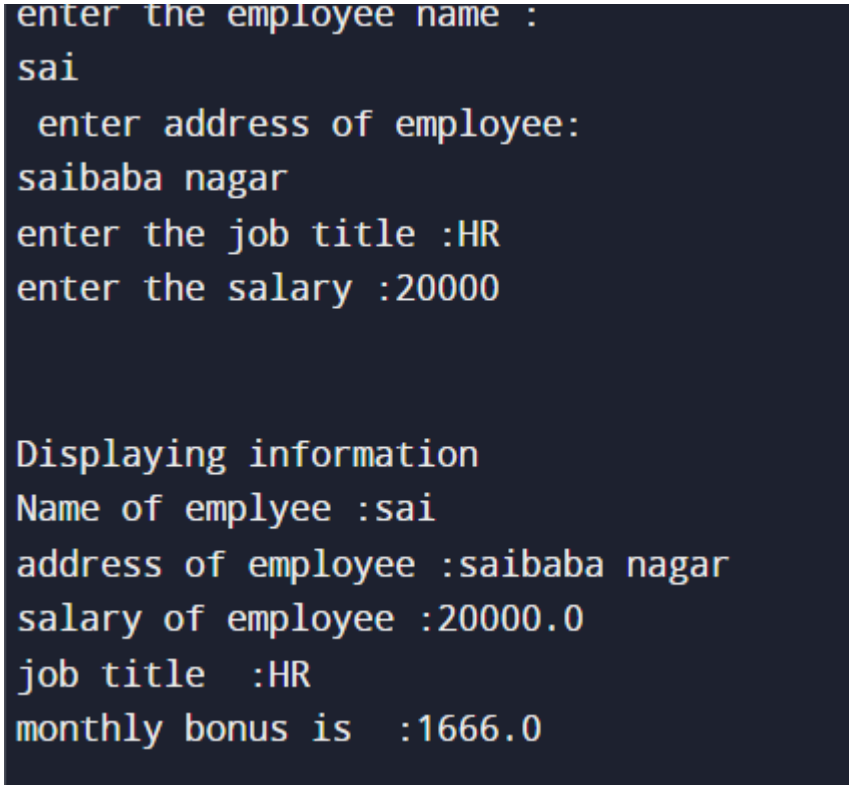
Program:

```
import java.util.Scanner;
class employee
{
    public double salary,bonus;
    public String name,address,job_title;
}
class manager extends employee
{
    public manager()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the employee name :");
        name=sc.nextLine();
        System.out.println(" enter address of employee:");
        address=sc.nextLine();
        System.out.print("enter the job title :");
```

```
        job_title=sc.nextLine();
        System.out.print("enter the salary :");
        salary =sc.nextDouble();
        bonus=salary*8.33/100;
    }
}
public class test
{
    public static void main(String args[])
    {
        manager s=new manager();
        System.out.println("\n\n"+"Displaying information");
        System.out.println("Name of emplyee :"+s.name);
        System.out.println("address of employee :"+s.address);
        System.out.println("salary of employee :"+s.salary);
        System.out.println("job title  :"+s.job_title);
        System.out.println("monthly bonus is  :"+s.bonus);

    }
}
```

Output:



5) CREATE THE CLASS SHAPE

PROGRAM:

```
class Shape {

    private String name;
    public void setName(String name) {
        this.name = name;
    }
    public String getName() {
        return this.name;
    }
}
```

```
class Employee extends Shape {

    private int employeeId;
    private String department;
    public Employee(String name, int employeeId, String department) {

        setName(name);
        this.employeeId = employeeId;
        this.department = department;
    }
    public String getEmployeeDetails() {
        return "Name: " + getName() + ", Employee ID: " + employeeId +
", Department: " + department;
    }
}
public class Main {
    public static void main(String[] args) {

        Employee emp = new Employee("John Doe", 12345,
"Engineering");
        System.out.println(emp.getEmployeeDetails());
    }
}
```

OUTPUT:

```
Name: John Doe, Employee ID: 12345, Department: Engineering
```