**EXPERIMENT-05**

**SOLUTION1:**

**CODE1:**

import java.util.Scanner;

public class lab4i

{

human h1=new human();

luckydraw l1=new luckydraw(11);

}

class human

{

private char gender;

public int age;

human()

{

System.out.println("Enter 'M' for male and 'F' for female:");

Scanner a=new Scanner(System.in);

char gen=a.next().charAt(0);

System.out.println("Enter Age:");

int ag=a.nextInt();

}

void show()

{

System.out.println("Gender:"+gender+"Age:"+age);

}

}

class luckydraw extends human

{

luckydraw(int ch)

{

if (ch>age)

{

System.out.println("eligible for draw!!");

}

else

{

System.out.println("Not eligible!!!!");

}

System.out.println("And your candidate is a "+gender);

}

}

**SOLUTION2:**

**CODE2:**

public class lab5ii

{

public static void main(String[] args)

{

hockey\_player c = new hockey\_player("Arjun", "hockey", 19);

cricket\_player f=new cricket\_player("Eesha","cricket",19);

Football\_player h=new Football\_player("Harnoor","Football",18);

c.showhl();

System.out.println("\nPlayer2:");

f.showcl();

System.out.println("\nPlayer3:");

h.showfl();

System.out.println("\n ArjunSingh-->R214220232");

}

}

class player

{

String name;

int age;

player(String n,int a)

{

name=n;

age=a;

}

void show()

{

System.out.println("Player name: "+name);

System.out.println("Age: "+age);

}

}

class hockey\_player extends player

{

String type;

hockey\_player(String n,String t,int a)

{

super(n,a);

type=t;

}

public void showhl()

{

super.show();

System.out.println("Player type : "+type);

}

}

class cricket\_player extends player

{

String type;

cricket\_player(String n,String t,int a)

{

super(n,a);

type=t;

}

public void showcl()

{

super.show();

System.out.println("Player type : "+type);

}

}

class Football\_player extends player

{

String type;

Football\_player(String n,String t,int a)

{

super(n,a);

type=t;

}

public void showfl()

{

super.show();

System.out.println("Player type : "+type);

}

}

**SOLUTION3:**

**CODE3:**

import java.util.Scanner;

public class lab5iii

{

public static void main(String[] args)

{

System.out.println("ArjunSingh--->R214220232");

Scanner sc = new Scanner(System.in);

System.out.println("Work Hours in a week:(for comparison in earning)");

int hour=sc.nextInt();

System.out.println(" Enter DAILY WORKER DETAILS");

System.out.println(" NAME:");

String name= sc.next();

System.out.println("ID NUMBER");

int no= sc.nextInt();

System.out.println("Rate");

int r= sc.nextInt();

System.out.println(" Enter SALARY WORKER DETAILS");

System.out.println(" NAME:");

String name2= sc.next();

System.out.println("ID NUMBER");

int no2= sc.nextInt();

System.out.println("Rate");

int r2= sc.nextInt();

System.out.println(" Daily worker Details");

dailyworker Dailyworker=new dailyworker(no,name,r,hour);

salariedworker SalaryWorker=new salariedworker(no2,name2,r2,hour);

Dailyworker.compay();

System.out.println(" Salaried worker Details");

SalaryWorker.compay();

}

}

class worker

{

String name;

int empno;

worker(int no,String n)

{ empno=no; name=n; }

void show()

{

System.out.println("Employee number is : "+empno);

System.out.println("Employee name is : "+name);

}

}

class dailyworker extends worker

{

int rate;

int hour;

dailyworker(int no,String n,int r,int h)

{

super(no,n);

rate=r;

hour=h;

}

void compay()

{

show();

System.out.println("Salary is : "+rate\*hour);

}

}

class salariedworker extends worker

{

int rate;

int hour;

salariedworker(int no,String n,int r,int t)

{

super(no,n);

rate=r;

hour=t;

}

void compay()

{

show();

System.out.println("Salary : "+rate\*hour);

}

}

**SOLUTION4:**

**CODE4:**

import java.util.Scanner;

public class lab5iv

{

public static void main(String[] args) {

{

System.out.println("ArjunSingh-->R214220232");

Manager m = new Manager("Abbie", 21453, 75000);

Scanner sd= new Scanner(System.in);

System.out.println("Menu:\n1. Name \t 2. Salary\t 3. All info");

int choice=sd.nextInt();

if (choice==1)

System.out.println("Name:"+m.getname());

else if(choice==2)

System.out.println("Salary:"+m.getPay());

else if(choice==3)

m.show();

else

System.out.println("WRONG INPUT!!!");

System.out.println("Salary increment percentage:");

int per=sd.nextInt();

m.increase\_salary(per);

Employee m2 = new Manager();

}

}

}

class Employee {

String n;

int id;

int pay;

Employee(String name,int emp\_id, int salary)

{

n=name;

id=emp\_id;

pay=salary;

}

void increase\_salary(int x) {

pay = pay+ ((x\*pay)/100);

System.out.println("The increased salary is : "+pay);

}

Employee()

{

System.out.println("Default constructor of Employee-->");

Scanner sc= new Scanner(System.in);

System.out.println("Enter name:");

n=sc.next();

System.out.println("EEnter ID:");

id=sc.nextInt();

System.out.println("Enter salary:");

pay=sc.nextInt();

}

void show()

{ System.out.println("\n--------------------------");

System.out.println("Name of Employee: "+n);

System.out.println("Employee id: "+id);

System.out.println("Salary of Employee: "+pay);

}

String getname()

{

return n;

}

int getPay()

{

return pay;

}

}

class Manager extends Employee {

String department="Technical";

Manager(String name,int emp\_id, int salary)

{

super(name,emp\_id,salary);

}

void show()

{

super.show();

System.out.println("Department: "+ department);

System.out.println("This is a Manager");

}

Manager()

{

n="No name provided";

id=00;

pay=0;

System.out.println("Default constructor of class Manager Called");

}

}