

ASSIGNMENT 4

Week 3 – Part –B

1.Program to define a class Item containing code and price.Accept this data for five objects using array of objects.Display code ,price in tabular form and also display total price of all items.

Source Code :

```
import java.util.Scanner;

class Item
{
    int price,code;

    Item(int code,int price)
    {
        this.code=code;
        this.price=price;
    }

    public void display()
    {
        System.out.println(code+"\t"+price);
    }
}

class ItemMain
{
    public static void main(String args[])
    {
        int p,c,total=0;

        Scanner sc=new Scanner(System.in);
```

```
Item ob[]=new Item[5];

for(int i=0;i<5;i++)

{
    System.out.println("Enter Code");
    c=sc.nextInt();
    System.out.println("Enter Price");
    p=sc.nextInt();
    ob[i]=new Item(c,p);
    total=total+ob[i].price;
}
System.out.println("Code\tPrice");
for(int i=0;i<5;i++)
    ob[i].display();
System.out.println("Total Price= "+total);
}
}
```

2.Program to define class Tender containing data members cost and company name.Accept data for five objects and display company name for which cost is minimum.

Source Code:

```
import java.io.*;

class Tender
{
    int cost;
    String company_name;
    Tender(int cost,String company_name)
    {
        this.cost=cost;
        this.company_name=company_name;
    }
    public void display()
    {
        System.out.println(company_name);
    }
}

class TenderMain
{
    public static void main(String args[])throws IOException
    {
        int c,min=999999,pos=0;
        String name;
        BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
        Tender ob[]=new Tender[5];
        for(int i=0;i<5;i++)
```

```

    {
        System.out.println("Enter Cost");
        c=Integer.parseInt(br.readLine());
        System.out.println("Enter Company Name");
        name=br.readLine();
        ob[i]=new Tender(c,name);
    }
    for(int i=0;i<5;i++)
    {
        if(ob[i].cost<min)
        {
            min=ob[i].cost;
            pos=i;
        }
    }
    System.out.print("Company with minimum cost is ");
    ob[pos].display();
}
}

```

3.Program to define a class employee with data members empid,name and salary.Accept data for 5 objects and print it.

Source Code :

```
import java.io.*;

class Employee
{
    int empid;
    String name;
    double salary;
    Employee(int empid,String name,double salary)
    {
        this.empid=empid;
        this.name=name;
        this.salary=salary;
    }
    public void display()
    {
        System.out.println(empid+"\t"+name+"\t"+salary);
    }
}

class EmployeeMain
{
    public static void main(String args[])throws IOException
    {
        int id;
        String name;
        double sal;
        BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
        Employee ob[]=new Employee[5];
        for(int i=0;i<5;i++)
        {
            System.out.println("Enter EmpId");
            id=Integer.parseInt(br.readLine());
            System.out.println("Enter Name");
```

```
        name=br.readLine();
        System.out.println("Enter Salary");
        sal=Double.parseDouble(br.readLine());
        ob[i]=new Employee(id,name,sal);

    }
    System.out.println("EmpId\tName\tSalary ");
    for(int i=0;i<5;i++)
        ob[i].display();

}
}
```

4. Define a class Circle which contains

Two private instance variables :radius (of type double) and color (of type string),
Initialize the variables radius and color with default value of 1.0 and “red”, respectively using default constructor.

Include a second constructor that will use the default value for color and sets the radius to the value passed as parameter.

Two public methods : getRadius() and getArea() for returning the radius and area of the circle.

Invoke the above methods and constructors in the main.

Source Code :

```
import java.io.*;
class Circle
{
    private double radius;
    private String color;

    Circle()
    {
        radius=1.0;
        color="Red";
    }
    Circle(double radius)
    {
        this.radius=radius;
        color="Red";
    }
    public double getRadius()
    {
        return radius;
    }
    public double getArea()
    {
        return (3.14*radius*radius);
    }
}

class CircleMain
{
```

```
public static void main(String args[])throws IOException
{

    double rad,area;

    BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
    Circle ob1=new Circle();
    Circle ob2=new Circle(7.0);
    rad=ob1.getRadius();
    area=ob1.getArea();
    System.out.println("Radius +"rad+" Area="+area);
    rad=ob2.getRadius();
    area=ob2.getArea();
    System.out.println("Radius +"rad+" Area="+area);

}
}
```