

OOP LAB#07(b)

Objective: Get familiar with concept of classes and objects in java.

Exercise#01: Assign and print the roll number, phone number and address of two students having names "Babar" and "Danish" respectively by creating two objects of class 'Student'.

Source code:

```
package studentdemo;
public class Student {
    int rn_no;
    long ph_no;
    String address,name;
    Student(String n,long p,int r,String ad){
        ph_no=p;
        rn_no=r;
        address=ad;
        name=n;
    }
    void print(){
        System.out.println("Name of Student is:"+name);
        System.out.println("His phone number is:"+ph_no);
        System.out.println("His Roll no is:"+rn_no);
        System.out.println("His address is:"+address);
    }
}
package studentdemo;
public class Studentdemo {
    public static void main(String[] args) {
        Student S1=new Student("Babar",313670504,136,"Jauhar");
        Student S2=new Student("danish",313763190,146,"Clifton");
        S1.print();
        S2.print();
    }
}
```

Output:

```
Name of Student is:Babar
His phone number is:313670504
His Roll no is:136
His address is:Jauhar
Name of Student is:danish
His phone number is:313763190
His Roll no is:146
His address is:Clifton
```

Exercise#02: Add two distances in inch-feet by creating a class named 'AddDistance'.

Source code:

```
package adddistancedemo;
public class AddDistance {
    int feet1,feet2,inch1,inch2;
    double inch;
    int adddistance(){
        return (feet1+feet2)+((inch1+inch2)/12);
    }
}
package adddistancedemo;
import java.util.Scanner;
public class Adddistancedemo {
```

```

public static void main(String[] args) {
    AddDistance ad=new AddDistance();
    Scanner sc=new Scanner(System.in);
    System.out.println("Plz enter first distance in feet:");
    ad.feet1=sc.nextInt();
    System.out.println("Plz enter Second distance in feet:");
    ad.feet2=sc.nextInt();
    System.out.println("Plz enter first distance in inch:");
    ad.inch1=sc.nextInt();
    System.out.println("Plz enter Second distance in inch:");
    ad.inch2=sc.nextInt();
    ad.inch=(ad.inch1+ad.inch2)%12;
    int feet=ad.adddistance();
    System.out.println("The total distance is "+feet+" feet "+ad.inch+" inches!");
}
}

```

Output:

```

Plz enter first distance in feet:
12
Plz enter Second distance in feet:
12
Plz enter first distance in inch:
14
Plz enter Second distance in inch:
14
The total distance is 26 feet 4.0 inches!

```

Exercise#03: Write a program using a class which shows implementation of a method that takes parameters.

Source code:

```

package cubedemo;
public class Cube {
    double breadth,height,length;
    //Parameterized method implementation;
    void setdimension(double b,double h,double L ){
        breadth=b;
        height=h;
        length=L;
    }
    double volume(){
        return breadth*height*length;
    }
}
package cubedemo;
public class Cubedemo {
    public static void main(String[] args) {
        double vol1=0;
        Cube Cu=new Cube();
        // Use of parametrized method
        Cu.setdimension(2.1,4.5,6.9);
        vol1=Cu.volume();
        System.out.print("The volume of cube is: "+vol1+" meter cube");
    }
}

```

Output:

The volume of cube is: 65.20500000000001 meter cube.

Exercise#04: Write a program using a class which shows implementation of a parameterized constructor.

Source code:

```
package boxdemo;
public class Box {
    double breadth,length,area1;
    Box(double b,double l){
        breadth=b;
        length=l;
    }
    double Area(){
        area1= breadth*length;
        return area1;
    }
    void print(){
        System.out.print("The Area of box is: "+area1);
    }
}
package boxdemo;
public class Boxdemo {
    public static void main(String[] args) {
        Box bx=new Box(4.5,6.7);
        bx.Area();
        bx.print();
    }
}
```

Output:

The Area of box is: 30.15000000000002.