

OOPS Assignment

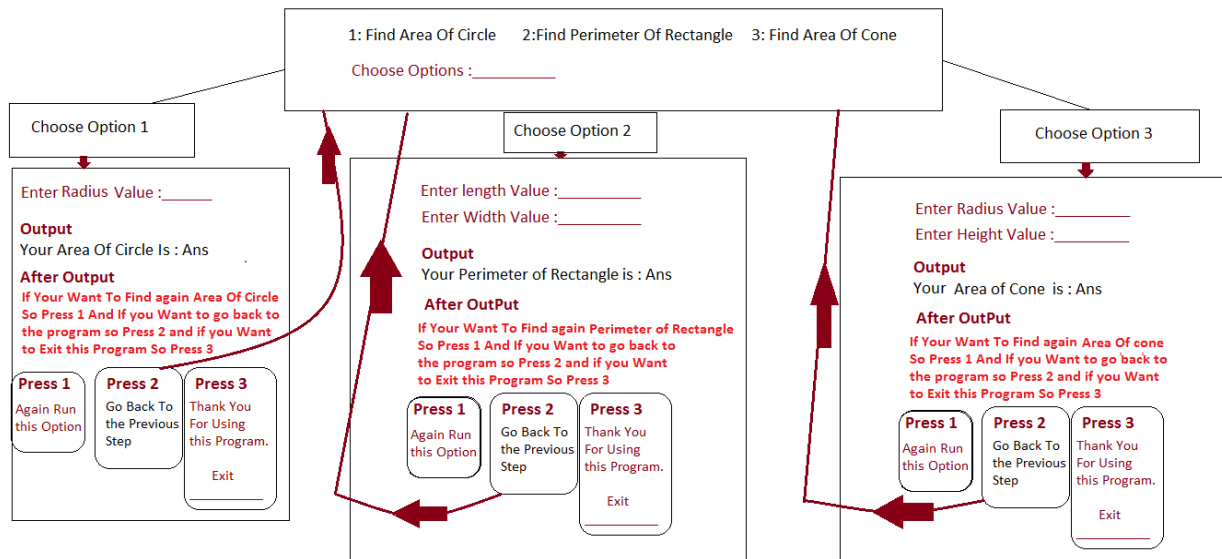
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COURSE : b.tech computer science engineering 2nd year

ROLL NO. : 18

SECTION : P

OOPS Assignment



Program Architecture

Program Code

```

import java.util.Scanner;

import java.io.*;

class as{

static final double pai=Math.PI;

static Scanner inp=new Scanner(System.in);

static void mainp(){

Scanner inp=new Scanner(System.in);

System.out.println("\n[1] Find Area Of Circle [2] Find Perimeter Of Rectangle [3] Find Area of Cone");

System.out.print("Choose Options : ");

int value=inp.nextInt();

if(value==1){

```

```

aoc();

}else if(value==2){

por();

}else if(value==3){

cone();

}

}

static void aoc(){

System.out.println("\n=====");

System.out.print("Enter Radius Value : ");

double value=inp.nextDouble();

double ans=pai*(value*value);

System.out.println("Your Area Of Circle is : "+ans);

System.out.println("\n=====");

System.out.print("If You Want To Find again Area of Circle So\nPress 1 and If You Want to go back to
the\nProgram So Press 2 and If You Want to Exit this Program So Press 3 : ");

int vl=inp.nextInt();

if(vl==1){

aoc();

}else if(vl==2){

System.out.println("=====");

mainp();

}else if(vl==3){

System.out.println("=====");

System.out.println("Thank You For Using This Program");

System.out.println("=====");

```

```

}else{

System.out.print("Some thing is Wrong");

}

}

static void por(){

System.out.println("\n=====");

System.out.print("Enter Length Value : ");

double ln=inp.nextDouble();

System.out.print("Enter Width Value : ");

double wt=inp.nextDouble();

double ans=2*(ln+wt);

System.out.println("Your Perimeter of Rectangle is : "+ans);

System.out.println("\n=====");

System.out.print("If You Want To Find again Perimeter of Rectangle So\nPress 1 and If You Want to go
back to the\nProgram So Press 2 and If You Want to Exit this Program So Press 3 : ");

int vl=inp.nextInt();

if(vl==1){

por();

}else if(vl==2){

System.out.println("=====");

mainp();

}else if(vl==3){

System.out.println("=====");

System.out.println("Thank You For Using This Program");

System.out.println("=====");

}else{

```

```

System.out.print("Some thing is Wrong");

}

}

static void cone(){

System.out.println("\n=====");

System.out.print("Enter Radius Value : ");

double rd=inp.nextDouble();

System.out.print("Enter Height Value : ");

double ht=inp.nextDouble();

double hts = Math.sqrt(rd * rd + ht * ht);

double ans1=(pai*rd*rd)+(pai*rd*hts); //this is a Formula of Area of cone

System.out.println("Your Area of Cone is : "+ans1);

System.out.println("\n=====");

System.out.println("\n=====");

System.out.print("If You Want To Find again Area of Cone So\nPress 1 and If You Want to go back to
the\nProgram So Press 2 and If You Want to Exit this Program So Press 3 : ");

int vl=inp.nextInt();

if(vl==1){

cone();

}else if(vl==2){

System.out.println("=====");

mainp();

}else if(vl==3){

System.out.println("=====");

System.out.println("Thank You For Using This Program");

System.out.println("=====");

```

```

}else{

System.out.print("Some thing is Wrong");

}

}

public static void main(String arg[]){

mainp();

}

}

```

Output

Area Of Circle Output

```

C:\Windows\system32\cmd.exe

C:\Users\natu\Desktop\as>javac as.java
C:\Users\natu\Desktop\as>java as
[1] Find Area Of Circle  [2] Find Perimeter Of Rectangle  [3] Find Area of Cone
Choose Options : 1
=====
Enter Radius Ualue : 30
Your Area Of Circle is : 2827.4333882308138
=====
If You Want To Find again Area of Circle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1
=====
Enter Radius Ualue : 60
Your Area Of Circle is : 11309.733552923255
=====
If You Want To Find again Area of Circle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1
=====
Enter Radius Ualue : 24
Your Area Of Circle is : 1809.557368467208
=====
If You Want To Find again Area of Circle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1
=====
Enter Radius Ualue : 20.6
Your Area Of Circle is : 1333.1662584773649
=====
If You Want To Find again Area of Circle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 3
=====
Thank You For Using This Program
=====
C:\Users\natu\Desktop\as>_

```

Perimeter Of Rectangle Output

```
C:\Windows\system32\cmd.exe

C:\Users\natu\Desktop\as>java as

[1] Find Area Of Circle  [2] Find Perimeter Of Rectangle  [3] Find Area of Cone
Choose Options : 2

=====
Enter Length Value : 30
Enter Width Value : 50
Your Perimeter of Rectangle is : 160.0

=====
If You Want To Find again Perimeter of Rectangle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1

=====
Enter Length Value : 50
Enter Width Value : 80
Your Perimeter of Rectangle is : 260.0

=====
If You Want To Find again Perimeter of Rectangle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1

=====
Enter Length Value : 6.5
Enter Width Value : 7.5
Your Perimeter of Rectangle is : 28.0

=====
If You Want To Find again Perimeter of Rectangle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1

=====
Enter Length Value : 80
Enter Width Value : 100
Your Perimeter of Rectangle is : 360.0

=====
If You Want To Find again Perimeter of Rectangle So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 3
=====
Thank You For Using This Program
=====

C:\Users\natu\Desktop\as>_
```

Area of Cone Output

```
C:\Windows\system32\cmd.exe

C:\Users\natu\Desktop>java as

[1] Find Area Of Circle   [2] Find Perimeter Of Rectangle   [3] Find Area of Cone
Choose Options : 3

=====
Enter Radius Value : 75
Enter Height Value : 25
Your Area of Cone is : 36298.81167481028

=====

If You Want To Find again Area of Cone So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1

=====
Enter Radius Value : 60
Enter Height Value : 60
Your Area of Cone is : 27304.11213029337

=====

If You Want To Find again Area of Cone So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 1

=====
Enter Radius Value : 88
Enter Height Value : 99
Your Area of Cone is : 60947.72545352021

=====

If You Want To Find again Area of Cone So
Press 1 and If You Want to go back to the
Program So Press 2 and If You Want to Exit this Program So Press 3 : 3

=====
Thank You For Using This Program
=====

C:\Users\natu\Desktop>
```