Date :- 3 - 11 - 2020, Name : Hritik Singh. USN :- 1BM19CS063.

OOJ Lab Program Week 8 :-

Lab Exercises 4

Input for Lab Exercise 4 :-

```
abstract class Shape
{
    int a, b;
    abstract void printArea(int a, int b);
}
class Rectangle extends Shape
{
    int area of rectangle;
    void print Area ( int l, int m)
    {
        a = l;
        b = m;
        area of rectangle = a*b;
        System.out.println (" The area of Rectangle is : " + area of rectangle):
    }
}
class Triangle extends Shape
{
    int areaof triangle;
    void printArea(int x, int y)
    {
        a = x;
        b = y;
        area of triangle = (int)(0.5 * a*b);
        System.out.println ("The area of triangle is : " + areaoftriangle
    }
}
    class Circle extends Shape.
```

Date: 3-11-2020, Name :- Sbrillk Singh. USN:- 1BM19CS065

```java
    {
        double    area of cirle :
        void   Print Area ( int z , int d)
            {
                a = z;
                d = 0;
                area  of  cirle = 3.14 * a * a;
                System. out . println (" The  area  of  Cirle  is"  + area of cirle);
            }
    }

    class  Shape Main
        {
            public static  void  main ( String [] args)
                {
                    Rectangle r1 = new Rectangle ();
                    Triangle  t1 = New Triangle ();
                    Cirle   c1 = new  Cirle ();
                    Shape  Ref of Shape :
                    Ref of shape  = r1 ;
                    Ref  of  shape . print Area (15, 20);
                    Ref of shape  = t1 ;
                    Ref of shape . print Area (50, 30):
                    Ref of shape = c1 ;
                    Ref of shape . Print Area (10, 0);
                }
        }
```

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```java
abstract class Shape
{
    int a,b;
    abstract void printArea(int a,int b);
}
class Rectangle extends Shape
{
    int areaofrectangle;
    void printArea(int l, int m)
    {
    a=l;
    b=m;
    areaofrectangle=a*b;
    System.out.println("The area of Rectangle is:"+areaofrectangle);
    }
}
class Triangle extends Shape
{
    int areaoftriangle;
    void printArea(int x, int y)
    {
    a=x;
    b=y;
    areaoftriangle=(int)(0.5*a*b);
    System.out.println("The area of Triangle is:"+areaoftriangle);
    }
}

class Circle extends Shape
{
    double areaofcircle;
    void printArea(int z, int d)
    {
        a=z;
        d=0;
        areaofcircle=3.14*a*a;
        System.out.println("The area of Circle is:"+areaofcircle);
    }
}
 class ShapeMain
{
    public static void main(String[] args)
    {
        Rectangle r1=new Rectangle();
```

Command Prompt

```
Microsoft Windows [Version 10.0.18363.1139]
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C:\Users\hriti>cd..

C:\Users>cd..

C:\>cd C:\Users\hriti\Documents

C:\Users\hriti\Documents>javac oojweek8.java

C:\Users\hriti\Documents>java ShapeMain
The area of Rectangle is:300
The area of Triangle is:450
The area of Circle is:314.0

C:\Users\hriti\Documents>
```

Java source file   length : 1,161   lines : 57   Ln : 46   Col : 32   Sel : 0 | 0   Windows (CR LF)   UTF-8   INS

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txt | wwww.java | whathappened.java | practicehelloworld.java | maam.java | segment.java | studentsee.java | Playermain.java | xyzw.java | oojweek8.java

```
14      System.out.println("The area of Rectangle is:"+areaofrectangle);
15  }
16  }
17  class Triangle extends Shape
18  {
19      int areaoftriangle;
20      void printArea(int x, int y)
21  {
22      a=x;
23      b=y;
24      areaoftriangle=(int)(0.5*a*b);
25      System.out.println("The area of Triangle is:"+areaoftriangle);
26  }
27  }
28
29  class Circle extends Shape
30  {
31      double areaofcircle;
32      void printArea(int z, int d)
33      {
34          a=z;
35          d=0;
36          areaofcircle=3.14*a*a;
37          System.out.println("The area of Circle is:"+areaofcircle);
38      }
39  }
40  class ShapeMain
41  {
42      public static void main(String[] args)
43      {
44          Rectangle r1=new Rectangle();
45          Triangle t1=new Triangle();
46          Circle c1=new Circle();
47          Shape Refofshape;
48          Refofshape=r1;
49          Refofshape.printArea(15,20);
50          Refofshape=t1;
51          Refofshape.printArea(30,30);
52          Refofshape=c1;
53          Refofshape.printArea(10,0);
54
55
56  }
57  }
```

Command Prompt

```
Microsoft Windows [Version 10.0.18363.1139]
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C:\Users\hriti>cd..

C:\Users>cd..

C:\>cd C:\Users\hriti\Documents

C:\Users\hriti\Documents>javac oojweek8.java

C:\Users\hriti\Documents>java ShapeMain
The area of Rectangle is:300
The area of Triangle is:450
The area of Circle is:314.0

C:\Users\hriti\Documents>
```

Java source file | length : 1,161 lines : 57 | Ln : 46 Col : 32 Sel : 0 | 0 | Windows (CR LF) | UTF-8 | INS

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