14. WAP a java program to create an abstract class named shape that has 2 integers & an empty method printarea(). 3 classes named Rectangle, Triangle, Circle, such that each class extends the class shape.

```
import java.util.*;
abstract class Shape
{
  int x,y
abstract void printarea()
{
}
}
class rectangle extends Shape
{
 rectangle (int a, int b)
{
  x=a;
  y=b;
}
void printarea()
{
  int res;
  res = x*y;
  System.out.println("Area is "+res);
}
}
class rectangle extends shape
{   triangle (int a, int b)
    {
      x=a;
      y=b;
}
```

```
void getarea()
{
    int res;
    res = 0.5 * d * b;
    System.out.println("Triangle area is " + res);
  }
}
class circle extends Shape
{ circle(int r)
  { a=r;
  }
    void getarea()
  { res = 3.14 * r * r;
  }
}
class main
{ public static void main(String args[])
  { Shape ob = Rectangle(2,4);
    ob.printarea();
    Shape ob1 = new triangle(4,4);
    ob1.printarea();
  }
}
```

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O/P Seen.

```
"C:\Program Files\Eclipse Adoptium\jdk-21.0.1.12-hotspot\bin\java.exe"
Area of Rectangle:20
Area of Triangle:10.0
Area of Circle:314.0
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```