```java
Program = 4
import java.util.*;
abstract class shape{
      public int x,y;
      public abstract void printArea();
    }
class Rectangle1 extends shape{
      public void printArea(){
      float area;
      area = x*y;
      System.out. println("Area of Rectangle
                             + area);
    }
  }
class Triangle extends shape{
      public void printArea(){
       float area;
       area = (x*y)/0.5;
     System.out. println("Area of Triangle is"
                             + area);
    }
  }
class circle extends shape{
     public  void printArea(){
        float area;
     area=(3.14*x*x);
     System.out. println("Area of circle is"
                             +circle);
    }
  }
class main{
    public static void Main(string[] args){
     int choice;
Scanner sc = new scanner(system.in);
```

```java
System.out.println (" 1. Area of Rectangle\n
                    2. Area of Triangle \n
                    3. Area of circle");
System.out.println("Enter your choice");
    choice = sc.nextInt();
    switch (choice){

case1:
    System.out.println ("Enter length & breadth");
    Rectangle r = new Rectangle ();
    r. x = sc.nextInt();
    r. y = sc.nextInt();
    r. printArea();
    break;

case2:
    System.out.println ("Enter breadth &
                                    height");
    Triangle t = new Triangle();
    t. x = sc.nextInt();
    t. y = sc.nextInt();
    r. printArea();
    break;

case 3:
    System.out.println ("Enter radius");
    circle c = new circle();
    c. x = sc.nextInt();
    c. printArea();
    break;

default:
    System.out.println ("Enter correct
                                    choice");
    }
}
}
```

OUTPUT

1. Area of rectangle
2. Area of Triangle
3. Area of circle
Enter your choice
1.
Enter length & breadth
    3 4 Area = 12.0

Enter your choice
2
Enter base
and heigh
4   6
Area =12.0

```
Enter height and width of rectangle
26
89
Area of Rectangle is 2314
Enter height and base of Triangle
90
100
Area of Triangle is 4500.0
Enter radius of Circle
8
Area of Circle is 200.96
```