Develop a java program to create an abstract class named shape that contains two integers and an empty method named PrintArea(). Provide 3 classes named Rectangle, Triangle and Circle such that each one of the classes extends the class Shape. Each one of the class contain only the method PrintArea() that prints the area of the given shape

```
class InputScanner{
    Scanner sc;
    InputScanner(){
        sc = new Scanner(System.in);
    }
Abstract class Shape extends InputScanner{
    double a;
    double b;
    abstract void getInput();
    abstract void display();
}}

class rectangle extends shape{
    rectangle(int a, int b){
        shape(double x)
        {
            a = x;
        }
        shape(double x, double y)
        { a = x; b = y; }
```

SURYA Gold
Date______ Page______

```
class Rec extends shape{
  void getInput() { System.out.println("Enter sides");
    a = sc.(Scanner)nextDouble();
    b = sc.nextDouble();
  }
  void display(){
    System.out.print("Area of rectangle is"+
                     a*b);
  }
class Triangle extends shape{
  void getInput(){
    System.out.println("Enter sides");
    a = sc.nextDouble();
    b = sc.nextDouble();
  }
  void display(){
    System.out.println("Area of triangle is"+(a*b)/2
  }

class circle extends shape{
  void getInput(){
    System.out.println("Enter radius");
    a = sc.nextdouble(); }
  void display(){
    System.out.print("area of circle is"+(Math.PI
          * side1 * side1 * a * a)
  }
```

```
public class Main{
  public static void main(String args[]){
    Rec R = new Rec();
    Triangle t = new Triangle();
    Circle C = new Circle();

    rectangle
    R.get input();
    R.display();

    t.get input();
    t.display();

    C.get input();
    C.display();
  }
}
```

output

Enter sides
10
5
Area of rectangle is 50

Enter sides
10
5
Area of triangle is 25

Enter radius
5
area of circle = 78.539816339

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