```
public class PreArea
{
    public static void main(String args[])
    {
        rectangle r = new rectangle();
        r.prearea();
        Triangle t = new Triangle();
        t.prearea();
        Circle c = new Circle();
        c.prearea()
    }
}
```

output:

```
Enter length and breadth of rectangle
10
20
length of rectangle : 10  breadth of rectangle : 20
area of rectangle : 200.0
Enter base and height of Triangle
12
2
height of triangle : 12  base of Triangle : 2
area of triangle : 12.0
Enter radius of circle
2
radius of circle : 2
area of circle : 12.56
```

Dec 2-1-14

```
        a = s.nextInt();
        b = s.nextInt();
        System.out.println("length of the
        rectangle : "+a+" breadth of rectangle : "+b);
        System.out.println("Area of rectangle "+area_rect);
    }
}

class Triangle extends shape
{
    public double area_triangle;
    public void printarea()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter base and
        height of triangle");
        a = s.nextInt();
        b = s.nextInt();
        area_triangle = (a*b)/2;
        System.out.println("height of triangle : "+a+
        "base of triangle "+b);
        System.out.println("area of triangle "+
        area_triangle);
    }
}
```

1/1/24

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

Step

1) Add class Input Scanner
2) Add class shape extend Input Scanner
3) Add class shape extends ~~Input~~ shape

```
import java.util.Scanner;

abstract class Shape
{

    int a,b;
    abstract public void printArea();
}

class rectangle extends shape
{
    public double area_triangle;
    public void printArea()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter length & breadth of
```