```
DATE 22/01/2/PAGE
1. abstract Class
     abstract day shape {
         protected int aimension ( )
         protected int dimension 2;
         public Shape (int dimension), int dimension2)?
         this dimension 1 = dimension 1;
         this dimension 2 = dimension 2;
          public abstract void print Area ();
         Class & Betangle extends shape &
           public Rectangle (int length, int width) &
            Super Clingto, width);
         public void printArea () &
            In+ area = dimension 1 x dimension 2;
          System. Ow - printin ( 66 threa of Rectangle: "+ area);
         Class Triangle extends Shape &
               public Tolangle Cint base, int height ) &
                 Super C base, height);
            public void print Area C15
               double area = 0. 5th dimension ( * dimension2)
           System. outs. printlo ( " Area of Pringle: "+ area);
          Class circle extends Shape &
                  public Virde (int radius) &
                     Super Cradius, 0 );
```

	DATE: PAGE:
public void printarea () &	
double area = Math. 1	PI * di mension 1 * dimension la
System. out. println ("	Area of circle. " Land
8	Tural
2	1 Parah - A A A A A A A A A A A A A A A A A A
public class Main &	solarib days of the last
public static void main (String [] args) &
Rectangle rectangle =	= new Rectangle (4,5):
rectangle. printArea ()	i motori mark to
Triangle triangle = ne	
tolangle_print Area();	
Circle circle = new Ci	
Circle print Area ();	
a month tunas	and Shine as
3	> Area Of Rectangle: 20
to amply and any	Area of Triangle: 9.0
Bank	Area of circle: 153.9380

AREA CALCULATION - ABSTRACT CLASS

import java.util.Scanner;
abstract class Shape{
int a,b;
Shape(int a,int b){
this.a=a;

```
this.b=b;
}
public abstract void printArea();
class Rectangle extends Shape{
Rectangle(int length,int breadth){
super(length,breadth);
public void printArea(){
System.out.println("Area of Rectangle = "+(a*b));
}
class Triangle extends Shape{
Triangle(int base,int height){
super(base,height);
public void printArea(){
System.out.println("Area of Triangle = "+(0.5*a*b));
}
class Circle extends Shape{
Circle(int radius){
super(radius,0);
```

```
}
public void printArea(){
System.out.println("Area of Circle = "+(Math.PI*a*a));
}
}
public class Area {
public static void main(String[] args) {
Scanner sc= new Scanner(System.in);
System.out.println("Enter length and breadth of Rectangle");
int length=sc.nextInt();
int breadth=sc.nextInt();
System.out.println("Enter base and height of Triangle");
int base=sc.nextInt();
AREA CALCULATION - ABSTRACT CLASS
int height=sc.nextInt();
System.out.println("Enter radiius of a Circle");
int radiius=sc.nextInt();
Rectangle rectangle=new Rectangle(length, breadth);
Triangle triangle=new Triangle(base, height);
Circle circle=new Circle(radiius);
```

```
rectangle.printArea();
triangle.printArea();
circle.printArea();
OUTPUT:
Enter length and breadth of Rectangle
10 20
Enter base and height of Triangle
2 5
Enter radiius of a Circle
8
Area of Rectangle = 200
Area of Triangle = 5.0
Area of Circle = 201.06192982974676
```