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Las 4 : Sting to string :-

```
import java.util.Scanner;

abstract class Shape
{
    int dim1;
    int dim2;

  public Shape()
{
   this.dim1 = 0;
   this.dim2 = 0;
}

 public Shape (int dim1, int dim2)
{
   this.dim1 = dim1;
   this.dim2 = dim2;
}
 public abstract void printArea();
}

 class Rectangle extends Shape
{ public Rectangle (int length, int width)
 {
     dim1 = length;
     dim2 = width;
  }
   public void printArea()
   {
 }
}
(public class shapes{

public static void main (String []args)
{
 Scanner in = new Scanner (System.in);
System.out.println("Enter length & width for
                                  Rectangle:");
```

```
int length = in.nextInt();
int width = in.nextInt();
Shape rectangle = new Rectangle(length, width);
rectangle.printArea();

System.out.println("Enter base & height for triangle:");
int base = in.nextInt();
int height = in.nextInt();
Shape triangle = new Triangle(base, height);
triangle.printArea();

System.out.println("Enter radius of circle:");
int radius = in.nextInt();
Shape circle = new Circle(radius);
circle.printArea();
in.close();

int area = dim1 * dim2;
System.out.println("Area of Rectangle " + area);
}
}

class Triangle extends Shape
{ public Triangle(int base, int height)
{ dim1 = base;
dim2 = height;
}
public void printArea()
{
double area = 0.5 * dim1 * dim2;
System.out.println("Area of Triangle: " + area);
}
}
```

```
class Circle extends Shape
{
    public Circle (int radius)
    {
        dim1 = radius;
        dim2 = 0;
    }
    public void printArea()
    {
        double area = Math.PI * dim1 * dim1;
        System.out.println("Area of Circle:" + area);
    }
}
public class shapes
{
    public static void main (String[] args)
    {
        Scanner in = new Scanner (System.in);
        System.out.println("Enter length and width for
                            rectangle:");
        int length = in.nextInt();
        int width = in.nextInt();
        Shape rectangle = new Rectangle (length, width);
        rectangle.printArea();
        System.out.println("Enter base & height for triangle");
        int base = in.nextInt();
        int height = in.nextInt();
        Shape triangle = new Triangle (base, height);
        triangle.printArea();
```

```
System.out.println("Enter radius for circle:");
int radius = in.nextInt();
Shape circle = new Circle(radius);
circle.printArea();
in.close();
System.out.println("Enter your name : AARUSHA.cp");
System.out.println("Enter your usn : 1BM23CS005");
}
}
```

Output:

```
Enter length and width for rectangle:
20
40
Area of Rectangle : 800
Enter base and height for triangle:
30
60
Area of triangle : 900
Enter Area of Circle:
radius
30
Area of Circle : 2827.43...
Enter your name: AARUSHA.cp.
Enter your usn : 1BM23CS005.
```

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