

# DecimalFormat Class

# What is the DecimalFormat Class

- A class that can format decimal numbers based on patterns. Formatting also rounds the number values depending on pattern
- The class is in the java.text package
- Oracle documentation:  
<https://docs.oracle.com/javase/8/docs/api/java/text/DecimalFormat.html>

# Using the DecimalFormat class

- 1) Create an object of the DecimalFormat class

```
DecimalFormat obj = new DecimalFormat();
```

```
DecimalFormat obj = new DecimalFormat(String pattern);
```

- 2) Use the format methods with a pattern

Some basic pattern characters

- 0 - indicates a number

- # - indicates a number, but doesn't keep 0s

- . - indicates a decimal point

- E – indicates scientific notation

- % - indicates percentage format

# Examples

```
double d = 0.504145;
```

```
DecimalFormat obj = new DecimalFormat("0.00");  
System.out.println(obj.format(d));
```

Outputs:

0.50

```
DecimalFormat obj2 = new DecimalFormat("0.##");  
System.out.println(obj2.format(d));
```

0.5

```
DecimalFormat obj3 = new DecimalFormat("0%");  
System.out.println(obj3.format(d));
```

50%

```
DecimalFormat obj4 = new DecimalFormat("0.0E0");  
System.out.println(obj4.format(d));
```

5.0E-1