

# Specifying data values in Java statements

University of Mount Union

CSC 120

Day 7

# Many times, we want to include specific values in Java statements

assignment statement

used to store a value in a variable or object

destination goes on the LEFT side of = operator

value goes on the RIGHT side of = operator

example: `x = 17;`

example: `myName = "Sammy";`

Calling a method – include data values in method's argument list

example: `boat1 = new Boat( "My Yacht", 50, 200 );`

# Format of data constants in a program

## Integer

positive or negative whole number , or zero

one or more digits, no decimal point, maybe + or – in front

examples: 74      – 55      0      17654

## Double

a number with a decimal point

Double stands for "double precision floating-point number"

examples: 2.5      0.47      3.14159      75.0      – 0.006

# Format of data constants in a program

## Character

a single letter, digit or punctuation symbol

must be surrounded with single quotes (apostrophes)

examples: 'A'      'm'      '7'      '#'      '@'

## String

a group of Characters (String stands for "string of characters")

must be surrounded with double quotes

examples: "Hello"      "Fred Flintstone"      ""      "My Yacht"

# Format of data constants in a program

## Color

either a built-in constant value (a color name), or a new Color that is composed of 3 values for red, green and blue

examples: `Color.RED`    `Color.DARK_GRAY`    `new Color(50, 10, 6)`

## Boolean

a TRUE or FALSE value

only two possible values, entered in lower case, with no quotes

examples: `true`    `false`

# Example Assignment Statements

```
private Integer x;
```

```
private Double d;
```

```
private String name;
```

```
private Color coatColor;
```

```
x = 17;
```

```
d = 900.5;
```

```
name = "Joe Schmoe";
```

```
coatColor = Color.ORANGE;
```

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