

Assignment #5

More Variables and Printing

Now we'll do even more typing of variables and printing them out. Every time you put " (double-quotes) around a piece of text you have been making a *string*. A string is how you make something that your program might give to a human. You print them, save them to files, send them to web servers, all sorts of things.

Strings are really handy, so in this exercise you'll learn how to make strings that have variables embedded in them.

As usual, just type this in even if you don't understand it and make it exactly the same.

```
public class MoreVariablesAndPrinting
{
    public static void main( String[] args )
    {
        String myName, myEyes, myTeeth, myHair;
        int myAge, myHeight, myWeight;

        myName = "Zed A. Shaw";
        myAge = 35;      // not a lie
        myHeight = 74;   // inches
        myWeight = 180;  // lbs
        myEyes = "Blue";
        myTeeth = "White";
        myHair = "Brown";

        System.out.println( "Let's talk about " + myName + "." );
        System.out.println( "He's " + myHeight + " inches tall." );
        System.out.println( "He's " + myWeight + " pounds heavy." );
        System.out.println( "Actually, that's not too heavy." );
        System.out.println( "He's got " + myEyes + " eyes and " + myHair + "
hair." );
        System.out.println( "His teeth are usually " + myTeeth + " depending
on the coffee." );

        // This line is tricky; try to get it exactly right.
        System.out.println( "If I add " + myAge + ", " + myHeight + ", and "
+ myWeight
        + " I get " + (myAge + myHeight + myWeight) + "." );
    }
}
```

What You Should See

```
U:\My Documents\CompSci\>java MoreVariablesAndPrinting
Let's talk about Zed A. Shaw.
He's 74 inches tall.
He's 180 pounds heavy.
Actually that's not too heavy.
He's got Blue eyes and Brown hair.
His teeth are usually White depending on the coffee.
If I add 35, 74, and 180 I get 289.

U:\My Documents\CompSci\>
```

```
U:\My Documents\CompSci\>java MoreVariablesAndPrinting
Let's talk about Zed A. Shaw.
He's 74 inches tall.
He's 180 pounds heavy.
Actually that's not too heavy.
He's got Blue eyes and Brown hair.
His teeth are usually White depending on the coffee.
If I add 35, 74, and 180 I get 289.

U:\My Documents\CompSci\>
```

What You Should Do on Your Own

1. Change all the variables so there isn't the `my` in front. Make sure you change the name everywhere, not just where you used `=` to set them.
2. Try to write some variables that convert the inches and pounds to centimeters and kilos. Don't just type in the measurements, but work out the math inside your Java program

```
Let's talk about Zed A. Shaw.
He's 74 inches (or 187.96 cm) tall.
He's 180 pounds (or 81.6466266 kg) heavy.
Actually that's not too heavy.
He's got Blue eyes and Brown hair.
His teeth are usually White depending on the coffee.
If I add 35, 74, and 180 I get 289.
```

3. Can I make a variable like this: `1 = "Zed Shaw"`?
4. How can I round a floating point number?
5. Why does this not make sense to me?