

CS 100 Exercise 2: The Java Begins

Summer 2001

Solution

1. Objective

The purpose of this exercise is to write some simple Java. Feel free to type this program in and play with it under CodeWarrior (see the CodeWarrior Guide on the Java page off the course website for more details). For the purposes of this exercise, you need only fill in the blanks (write on this page) and submit it at the beginning of lecture.

// Exercise 2, CS 100 Summer 2001

```
public class Exercise2 {
    public static void main(String[] args) {

        // Test your arithmetic abilities
        // (Fill in the blank comments with what the output will be)
        // Answers should use the correct format (int/double).
        System.out.println(5.0/2.0);      // _2.5_
        System.out.println(5.0/2);       // _2.5_
        System.out.println(5/2);         // _2_
        System.out.println(6-2+4);       // _8_
        System.out.println(6-(2+4));     // _0_
        System.out.println((int)(5.0/2)); // _2_

        // Tell the world how tall you are (no variables!)
        // Answers will vary, but should include a string.
        System.out.println(_"I am five feet, six inches tall."_);

        // Declare some useful variables
        int heightFeet, heightInches;
        // Assign values to them
        // (Fill in values so that the print statement makes sense)
        // Values must match the declared type (int), i.e. no decimal places.
        heightFeet = _5_;
        heightInches = _6_;
        System.out.println("I am " + heightFeet + " feet, " +
                           heightInches + " inches tall.");

        // Calculate the total inches by initializing totalInches
        // (Provide a formula for calculating the total inches using
        //  heightFeet and heightInches)
        // Wrong answer: (must use formula)
        // int totalInches = _____66_____ ;
        // Right answer:
        int totalInches = __heightFeet * 12 + heightInches_____;
        System.out.println("That is a total of " + totalInches + " inches.");

        // Convert to centimeters
        // Important: good choice of variable name; again, must use formula
        double _heightCm_ = _totalInches * 2.5_____ ;
        // Print out the number of centimeters in a nice format
        // Must use the variable created above.
        System.out.println(_"It is also " + heightCm + " centimeters."_);
    }
}
```