

TINKER ACADEMY

AP Computer Science Prep (Java Programming)

Homework 4: Data Types, Variables & References

Make sure you read the Handout slides!

Overview

In this Homework you will work on writing code using literals, operators and variables. You might need to refer to the Handout slides for Week 3 to complete this homework. The Handout slides for Week 3 can be accessed from TinkerCourses.

Open the Homework

Import Java Project

1. Open File Manager
2. Navigate to TinkerCourses, TA-JAV-2, homework4
3. Right Click, extract Homework4.zip
4. Double click to Open eclipse (under Tinker Apps)
5. Right click over Package Explorer
6. Import...
7. Select extracted folder Homework4

Before you begin

Keep the handout slides for Week 3 open

Structure of the Program

Homework4 is an Eclipse Java Project. The Project has

1. A Java Source File called "Homework4.java"
2. The Homework4 class contains the main method

Complete the Homework

Homework Part 1

Type in all code for Part 1 in the method homeworkPart1

1. Declare a local variable called hours of datatype int
2. Declare a local variable called pay of datatype double
3. Declare a local variable called m of datatype char
4. Declare a local variable called result of datatype boolean
5. Declare a local variable called leapYear of datatype int with initial value 365
6. Use the + operation to add 1 to the leapYear
7. Reassign the result of the operation from Step 6 above back to leapYear
8. Assign the newline character to m. The newline character is '\n'
9. Use the ==, && and || operation to calculate the value of the expression

```
(result == true) || (result == false)
```

Assign the value of the expression back to the variable result

Homework Part 2

Type in all code for Part 1 in the method homeworkPart2

1. Declare a local variable called celcius of datatype double and assign the initial value 37.0
2. Declare a local variable called fahrenheit of datatype double and assign the initial value 0.0
3. Write an expression in Java to convert the temperature from celcius to fahrenheit using the formula below

```
(32.0 + celcius * 9.0/5.0)
```

4. Assign the value of the expression to fahrenheit

Ensure there are no errors

If all is good, you should see no errors, no red markers in the Homework4.java source file and no errors in the Problems View

Submit the Homework

Submit your changes

1. Make sure you are on the Home WiFi.
2. Save All your changes

3. Open File Manager
4. Click TinkerSetup
5. Double Click "Course Submit"

All the Best!