Andy Cherney

Week1Meet - 10 pts

Turn in on BBL as soon as complete, but before end of day Sunday following the lecture.

================================

Reading a program

Write a line-by-line translation to English of the TempConv program.

```java
/**************************************
 * TempConvert.java
 * temperature conversion program
 *
 * @author Tammy Pirmann
 * @version 1.0
 **************************************/

class TempConvert {

  public static void main (String args[]){
    double fahr = 98.6; //change this value and run again
    double cels;

    cels = ( 5.0 * (fahr - 32.0 ) ) / 9.0;

    System.out.println(fahr + "F is " + cels + " in C.");
    //pay attention to spaces inside the quotes

  }
}
```

1. Take in a fahrenheit value
2. Initialize the celsius variable
3. Convert the Fahrenheit value to Celsius and assign to Celsius variable
4. Print the result to the console

================================

Problem:

● I recently bought a house, and I don't like the interior wall colors. I want to re-paint some of the walls but do not know how much paint to buy

● I know 1 quart of paint will cover 100 square feet

I understand the problem introduced in class to be: (in your own words)

Given an area of the wall in square feet, find the amount of paint needed to cover the wall given that 1 quart covers 100 square feet.

My plan to solve this problem is:

1. Find the height and length of the wall
2. Calculate area (length * width)
3. Divide the area by 100 qt to get the amount of paint needed (cast as integer)

The solution to the problem was the following program: (provide the name of the .java file only)

PaintProgram.java

I tested the solution with at least 3 different value sets. The test data and results are:

(use this format: var1 = data, var2 = data, etc -> result)

length = 100, height = 72 -> 1

length = 200, height = 155 -> 3

length = 1500, height = 25000 -> 2605

Reflect on your problem-solving:

How confident are you in the solution?

I would say I'm very confident, but more test cases are always better to have.

What might prevent you from using this problem-solving process in the future?

I would say this is a pretty good problem-solving method. It helps you approach it by coming up with a plan to solve a sub-problem.

Reflect on your learning and your needs. After this class meeting, what topics do you feel like you learned and what topics do you feel like you need more information on to learn?

I learned how to use the scanner to add user input to a program. I also learned about Math.ceil() and how it rounds up the value to an integer.