Homework 5

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SWE437-001

**User Story:**

**First Test:** Converting the ratio from Miles per Gallon to Kilometers per Liter results in the correct output.

**Changes made:** After obtaining successful output for the conversion, we added another conversion in the test to convert the converted number back to MpG to see if we got the same value back. This change saved us from writing another test for converting KpL to MpG, since the value we got back was equal to the original value.

**Refactoring:** While adding in the second conversion into the test we refactored the assertEquals method to see if the original value (MpG) was equal to that value being converted to KpL then back to MpG. This saved us a few lines of code while testing for the same thing.

**User Story:**

**First Test:** Converting the temperature from Kelvin to Celsius results in the correct output.

**Changes made:** We made the same changes in this test as we did for the test for converting between MpG and KpL. After obtaining successful output for the conversion, we added another conversion in the test to convert the converted number back to Kelvin to see if we got the same value back. This change saved us from writing another test for converting Celsius to Kelvin, since the value we got back was equal to the original value.

**Refactoring:** We refactored this test the same way we refactored the previous test with converting between MpG and KpL. While adding in the second conversion into the test we refactored the assertEquals method to see if the original value (Kelvin) was equal to that value being converted to Celsius then back to Kelvin. Just like the acceptance test we made for MpG and KpL, this saved us a few lines of code while testing for the same thing.

**User Story:**

**First Test:** Getting the correct rounded value from the conversion based on the decimal place the user wanted to round to (decimal places 0-4) for converting gallons to liters.

**Changes made:** Throughout testing we changed the values we wanted to round to (values 0-4) as well as changing what units we were converting to. This ensured the entire input domain passed the test.

**Refactoring:** There was no refactoring done to this acceptance test.