wk1-Filtering Data

Saturday, December 12, 2020   3:18 PM

✓ **Congratulations! You passed!**
  TO PASS 65% or higher

Keep Learning

GRADE
100%

Filtering Data

TOTAL POINTS 5

1. For the assignment you wrote the method **quakesWithFilter** in the class EarthQuakeClient2 to filter earthquakes using two criteria, those that are less than 10,000,000 meters (10,000 km) from Tokyo, Japan whose location is (35.42, 139.43), and that are in Japan (this means "Japan" is the last word in the title). Modify this method to run your program on the file **nov20quakedata.atom** (a file with information on 1518 quakes) with the same criteria. You should also print out the number of such earthquakes found.   **1 / 1 point**

   How many such earthquakes are there?

   > 20

   ✓ Correct

2. For the assignment you wrote the method **quakesWithFilter** in the class EarthQuakeClient2 to filter earthquakes using two criteria, those with magnitude between 4.0 and 5.0 inclusive and depth between -35,000.0 and -12,000.0 inclusive. Modify this method to run your program on the file **nov20quakedata.atom** (a file with information on 1518 quakes) with the same criteria. You should also print out the number of such earthquakes found.   **1 / 1 point**

   How many such earthquakes are there?

   > 24

   ✓ Correct

3. For the assignment you wrote the method **testMatchAllFilter** in the class EarthQuakeClient2 to filter earthquakes using three criteria, those with magnitude between 0.0 and 2.0, to test the depth between -100,000.0 and -10,000.0, and if the letter "a" is in the title. Modify this method to run your program on the file **nov20quakedata.atom** (a file with information on 1518 quakes) with the same criteria. You should also print out the number of such earthquakes found. Make sure you are using the updated (1/12/16) EarthQuakeParser class.   **1 / 1 point**

   How many such earthquakes are there?

   > 358

4. For the assignment you wrote the method **testMatchAllFilter2** in the class EarthQuakeClient2 to filter earthquakes using three criteria, those with magnitude between 0.0 and 3.0, to test for the distance from Tulsa, Oklahoma at location (36.1314, -95.9372) is less than 10,000,000 meters (or 10,000 km), and if the substring "Ca" is in the title. Modify this method to run your program on the file **nov20quakedata.atom** (a file with information on 1518 quakes) with the same criteria. You should also print out the number of such earthquakes found. Make sure you are using the updated (1/12/16) EarthQuakeParser class.   `1 / 1 point`

How many such earthquakes are there?

616

5. When the **getName** method signature is added to the Filter interface, which of the following is most likely NOT a needed change to the **DepthFilter** class?   `1 / 1 point`

○   A new method **getName** to return the name of the filter.

○   A parameter in the constructor to initialize the name of the filter.

○   A new private String instance variable to store the name of the filter.

◉   A new method **setName** to change the name of the filter.