Grade 12 Assignment #2 Java Programming

Google Maps (Continents and Major Cities):

Let's practice the Java switch statement that you learned about.

In this project, you are going to use a switch statement to print out geographical information. You will write a program that will print out a continent and the largest city in that continent, based on the value of an integer.

The instructions provided are general guidelines. Upon completion of the project, feel free to add functionality of your own.

Tasks:

There are 19 Tasks to complete for this assignment:

1. Open the BlueJ IDE editor to create the code needed for the program called Google Maps (Continents and Major Cities).

2. First set up the BlueJ IDE. Create a project (file) with a public class called Continents.

3. Then create a main body for the program code to reside in (public static void main(String[] args)).

The main part of the code will have a switch statement that decides the output that will print to the screen; The output will be based on one of the 7 continents in the world, each one residing in a country and having a major city. The user input will be predetermined using a variable assigned to an integer.

4. Within the main body of code, create a variable. Create an int variable called continent and set it equal to 4.

5. Then create a conditional switch statement that will control the output (flow) based on the value of continent.

6. Inside of the switch statement, add a case that will run when the value of continent is 1.

7. When the value of continent is 1, print out North America: Mexico City, Mexico.

8. Make sure the next line exits out of the case.

9. Add another case that will run when the value of continent is 2. When this value is met, print out South America: Sao Paulo, Brazil.

10. Make sure the next line exits out of the case.

11. Add another case that will run when the value of continent is 3. When this value is met, print out Europe: Moscow, Russia. Make sure the next line exits out of the case.

12. Add another case that will run when the value of continent is 4. When this value is met, print out Africa: Lagos, Nigeria. Make sure the next line exits out of the case.

13. Add another case that will run when the value of continent is 5. When this value is met, print out Asia: Shanghai, China. Make sure the next line exits out of the case.

14. Add another case that will run when the value of continent is 6. When this value is met, print out Australia: Sydney, Australia. Make sure the next line exits out of the case.

15. Add another case that will run when the value of continent is 7. When this value is met, print out Antarctica: McMurdo Station, US. Make sure the next line exits out of the case.

16. Finally, add the default case. The default case should print out Undefined continent! Make sure the next line exits out of the case.

    If the program is written correctly, your output should be Africa: Lagos, Nigeria. Great work!

17. It would be helpful to describe to other developers what this small Java program does. Write some comments that describes what this program does.

    a. Use multi-line comments to (/* comment in the middle of */):
        i. Write one at the top of the code (before the public class Continents designation) that gives a quick intro/description the assignment.
        ii. Write one at the top of the code (before the public static void main(String[] args)) that summarizes the program.
    b. Use a single line comment to (//then comment):
        i. Create 3 comments anywhere you deem necessary or important in the code. Remember the comment is to highlight or explain what is going on or what is being done in a particular way or used and why.
        ii. Identify the switch statement and indicate its purpose.

iii. Identify the last line of code (anything that ends with a curly bracket }) in every function by writing “End of BLAH-BLAH function”.
iv. Identify the end of the program.

18. Once your program is complete, make sure to test it using the BlueJ IDE (do not submit a program that does not work).

19. Lastly, upload (drag and drop) your assignment to the portal. Look for your name under the Assignment 2 webpage.