Create a Conversion Program

Create a conversion program that performs the tasks listed below. Make sure you have get and set methods for each of the variables found in the classes you will create. The four classes are:

1. The driver program (e.g Main.java) – The driver program will display a menu (use a do while loop for this) and ask the user the kind of conversion they would like to make such as temperature, distance, weight, or currency. If the user selects an invalid option an appropriate error message will be displayed and the user would be prompted to select a valid option or to exit the application. If the user selects a valid option from those listed, e.g. temperature, then another option will be presented to prompt the user for the kind of conversion to make (**e.g. Celsius to Fahrenheit or Fahrenheit to Celsius, Celsius to Kelvin, etc**.). Use a **switch statement** to capture the kind of conversion the user wants to do. Then create a scanner object and get the value to be converted from the keyboard. You can get the formula to perform each type of conversion from your google search. After the conversion is done display a formatted output showing the original value and the converted value (**e.g. 30 degrees Celsius is equal to 212 degrees Fahrenheit**), then ask the user if they want to perform another conversion just as they did when they first launched the application. If they answered yes, display the menu, and get the response and process the selection the user made, otherwise thank the user for using the conversion program and terminate the program.

2. Temperature conversion program (e.g. **tempConversion.java**) – This program should convert temperature from Celsius to Fahrenheit and from Fahrenheit to Celsius depending on the kind of conversion the user wants to make.

3. Weight conversion program (e.g. weightConversion.java) – this program should convert from **lb** to **kg** or from **kg** to **lb** depending on the conversion the user wants to make.

4. Currency conversion program (e.g. **currencyConversion.java**) – this program should convert from USD – EUR or from EUR to USD depending on the conversion the user desires to make. Use the latest conversion values found on Yahoo finance.

In each of your classes, you must declare appropriate variables, use a default and a parametrized constructor, create the methods you need to provide the services the class is responsible for, have the appropriate get and set methods. When passing parameters use the same variable names as the instance variables found in the class and use the **this** keyword. Declare all your variables as **private** and all your methods as **public**. Test each of the classes using your driver program and provide the test cases and test results.