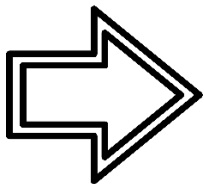


Assignment



Overview

For this assignment you will create a program that calculates the amount of interest for a loan amount(The simple way not compounded per month). The user will enter the loan amount and interest rate(in decimal format NOT percent). The program will then print out the loan amount, interest rate in percentage form and the calculated interest on the loan (loan amount * interest). The Math and NumberFormat classes should be utilized for proper formatting and calculations. Lastly the program should loop and ask the user to calculate another loan.



Directions

To Get Started:

1. Create a new project in IntelliJ(or your preferred IDE) called **YOUR_MCC_Name-Assignment2**
2. Lastly, create a new java class file named **InterestCalculator.java**
 - This will contain your main method and all the code for the assignment.

Coding the file:

You will need to get 2 inputs (both floating-point numbers) for the following values:

- Loan amount
- Interest rate (in floating-point NOT percentage base - so not 7% the input would be .07)

You should then create a double variable that holds the accrued interest (loan amount * interest rate)

Once this is calculated you should use the Math.round() method to round to 2 decimal places for the most accurate amount we can get.

Lastly we need to display out the loan amount, interest rate (in percent form), and the interest amount in a nicely formatted form. You will need to implement the use of NumberFormat objects for both currency and percent here. Use whatever way of printing that you would like.

- The currency object should be accurate to 2 decimal places(the default)
- The percent object should allow for up to 3 decimal places (this will need to be modified)

Submission

1. Compress the IntelliJ project folder and submit it to this assignment.

to compress: On Windows, right click -> send to -> compressed .zip file

on Mac, right-click -> Compress

Hints/Tips (Before Submitting):

- *Don't forget to have a header file at the top of your file and include a **Resource statement**.*
- *Use comments throughout for full points.*
- *Follow all Java Styling Guides as covered*
- *For this assignment it would be best to follow the example output. Pay close attention to spacing and aligning values*
- *You should format currencies to allow for up to 2 decimal places and percentages to allow for up to 3 decimal places.*
- *The application should continue only if the user enters "y" or "Y" to continue.*

Example Output(User input is bolded):

Welcome to the Interest Calculator

Enter loan amount. : **520000**

Enter interest rate: **.05375**

Loan amount: \$520,000.00

Interest rate: 5.375%

Interest: \$27,950.00

Continue? (y/n): **y**

Enter loan amount. : **4944.5**

Enter interest rate: **.01**




Loan amount: \$4,944.50

Interest rate: 1%

Interest: \$49.45

Continue? (y/n): **n**

Grading Rubric

Assignment2 - Interest Calculator   			
Criteria	Ratings		Pts
Comments Header, comments on variables, & logical comments	20 pts Full Marks	0 pts No Marks	20 pts
Program Implementation -Getting Input -Calculating Interest -Rounding -NumberFormat objects	45 pts Full Marks	0 pts No Marks	45 pts
Correct Output	10 pts Full Marks	0 pts No Marks	10 pts
Total Points: 75			