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CMPT 220 Project 2

Written Work

Analysis

The problem is asking for you to make a method that calculates future investment value using a double for investment amount, a double for monthly interest rate, and an int for the number of years after investment. You would use these numbers in the given equation. After writing the method, it is required that you allow for the user to input a rate and investment amount and then the code should use your method to output a table for future investment value for years 1 to 30.

Design

1. You need to make the method. This is the easy part. Just plug in the ints and doubles to their respective places in the equation.
2. Allow for user input for rate and investment.
3. Make the first array size 30. This will be the year array for integers 1-30.
4. Make the second array size 30 for the future values.
5. Make a loop that displays each element of the two arrays side by side. This loop will also fill the arrays. Allow for user input and calculate each value using the two inputs for each year for the future values array using the method (make sure to divide the rate by 12 since the example shows the annual rate, not the monthly rate). Put integers 1-30 in the year array.

Testing



The most logical way to test this program is to test either the method or the loop, the two crucial parts. To test the method, just print out different outputs of different arguments on a separate line and calculate them on your own to make sure the calculation is correct. The loop will be easier to test because all you have to do is change your inputs and make sure the calculations are correct and that the table looks good. Of course, in both cases one would want to try to recreate the examples on the project 2 pdf.