CSE 2133 - Lab 3

Part A consists of an interactive program that will generate a payment schedule for a loan. This interactive program is to be named **lab3.cob**. This program will prompt the user for three inputs: the loan amount, the annual interest rate, and the number of monthly payments. The program will calculate the monthly payment, the total of all payments, and the entire payment schedule for the loan. All output is displayed to the console.

Ensure that the inputs are valid (positive). If an invalid value is provided by the user the program will note why the value was not valid and then ask for the value again.

For field sizes, allow for loans up to $99,999,999.99, interest rates up to 99.99%, and loans that last for 999 months.

Sample session (user input in bold):

```
Lab3
Enter Loan Amount: 25000
Enter Annual Interest Rate: -4.5
Annual Interest Rate must be positive
Enter Annual Interest Rate: 4.5
Enter Number of Months: 12


Payment Schedule:

 Loan Amount       $25,000.00
 Interest Rate        4.500%
 Months                   12
 Payment           $2,134.46
 Total Payments    $25,613.52

  Month         Balance      Interest  Principal
     1       $25,000.00        $93.75  $2,040.71
     2       $22,959.29        $86.10  $2,048.36
     3       $20,910.93        $78.42  $2,056.04
     4       $18,854.89        $70.71  $2,063.75
     5       $16,791.14        $62.97  $2,071.49
     6       $14,719.65        $55.20  $2,079.26
     7       $12,640.39        $47.40  $2,087.06
     8       $10,553.33        $39.57  $2,094.89
     9        $8,458.44        $31.72  $2,102.74
    10        $6,355.70        $23.83  $2,110.63
    11        $4,245.07        $15.92  $2,118.54
    12        $2,126.53         $7.97  $2,126.49
```

Bonus Points

Bonus points are possible if the program generates a valid HTML file that has the payment schedule in an HTML table, with borders. This means the file created has an extension of "html" and has all of the necessary tags in order to be a valid html file.