COMPUTER SCIENCE 171 - MACHINE PROBLEM 2
due Wednesday Feb 11th, 2015

Printed items to hand in:
- Your program listing (cut-and-paste into Word)
- Program output (use <CTRL><PrntScr> to copy)
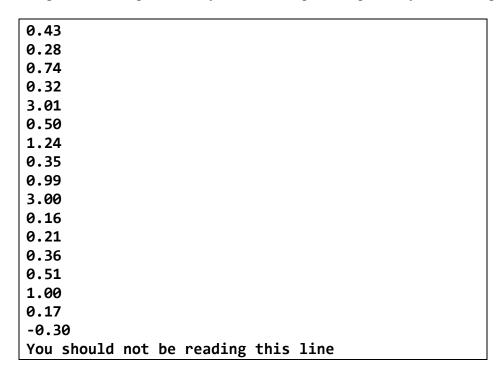- Data input file you used

   Your local supermarket is having a "coupon bonanza" this week, offering you incentives to come in and use all those coupons you have cut out of the paper. Of course, they hope you will buy lots of other items while you are in the store - but that does not concern us for this assignment!

The store offer is as follows:
1. If the face value of the coupon is 35 cents or less:
       the first 4 of these get triple value, any additional ones get double value.
2. If the face value is over 35 cents but less than 51 cents, it gets double value - no matter how many there are.
3. If the face value is 51 cents or over but less than $1.00, it gets a value of $1.00.
4. Any coupons of $1.00 or more, get their face value.

Your assignment is to read in a series of face values for coupons, calculate and print the actual value of each one, total the actual value of all of the valid coupons and count how many *valid* coupons were processed. The maximum allowable face value of a coupon is $3.00. Any data value above that limit should cause an error message to be printed and the program should then continue on to the next coupon. Bad data **must not** be included in the count of valid coupons.

More specifically, your program must read in a series of face values from a <u>data file</u> that you have to create using the following data, and you should stop the loop when you see a negative number:

```
0.43
0.28
0.74
0.32
3.01
0.50
1.24
0.35
0.99
3.00
0.16
0.21
0.36
0.51
1.00
0.17
-0.30
You should not be reading this line
```

Sample output appears on next page:

```
Read      Bonus
value     Value
-----     -----
$ 0.43    0.86
$ 0.28    0.84
$ 0.74    1.00
$ 0.32    0.96
$ 3.01    ERROR!
$ 0.50    1.00


    ...  Details omitted here but your program will show them ...


Number of valid coupons:
Total Value of all coupons:  $
Press any key to continue . . .
```