Assignment #5a PROG5a.BAS

Control Structures - Loops

It is alleged by some that the ozone is being depleted by CO^2 gasses released into the atmosphere by humans (anthropogenic). Some theorize that if the ozone reaches a level of 200 p.p.b. (parts per billion) life on earth as we know it will be unsustainable.

Assignment #7 requires the use of nested loops as well as some unique output formatting we have discussed (`LOCATE [row], [column]`) in addition to other formatting structures, in order to produce the desired screen output.

Input:

a) Prompt the user to enter a projected percentage of ozone depletion.
b) Prompt the user for any additional projected percentages of ozone depletion.
c) If the user enters a `0` (zero) for the projected percentage of ozone depletion the program should end.

Processing Requirements:

a) Assume a beginning ozone level of 450 p.p.b. for each calculation.
b) Using a sustained projected percentage rate of depletion, calculate the number of years until ozone levels fall below the hypothetical safe level of 200 p.p.b.
c) The process of outputting the data should be controlled by nested loops that iterate until the user enters the projected percentage rate of ozone depletion of 0 (zero) thus ending the program.

Output:

a) Each time the user is prompted to enter a new projected depletion percentage rate the program should display the new prompt on the same line as the original prompt.
b) Column headings Loss Rate, Years, and Final Ozone Concentration should be used.
c) The results of each new calculation should be displayed beneath the appropriate column heading and directly under the previously outputted results.

OUTPUT SCREEN

```
Enter another projected depletion rate or 0 to quit: _

   Loss                    Final Ozone
   Rate        Years     Concentration
  10.00%           8          193.7
   7.50%          11          190.9
   5.00%          16          198.1
   2.50%          33          195.1
   1.00%          81          199.4
   0.50%         162          199.8
   0.05%       1,622          199.9
```