Lab 4: Sentinel Loops based on EOF
plus Character Handling

Recommended Reading: Chapter 8, sections on character handling.

Due Thursday, Feb 12 before 2:00 pm. There is a 30-minute grace period.

Lab Time Ends at 2:00 pm. You should have submitted <u>something</u> on Canvas by that time.

Part A: Name your program lab4a.c

1. Input integer values until EOF is reached.

2. Count how many values are negative, how many are positive, how many are even, and how many are odd. *« Note: zero is neither negative nor positive... don't count zero values »*

3. After EOF is reached, display the results along with appropriate messages:

    - number of negative values   ###
    - number of positive values   ###
    - number of even values   ###
    - number of odd values   ###

4. Compile, test, and debug thoroughly.   Test your program both with input from the keyboard and input redirection (taking input from a file).

Part B: Name your program lab4b.c

1. Input characters until EOF is reached.

2. Using the functions from the character handling library, ctype.h, count how many chars are letters, how many are digits, how many are whitespace, and how many are punctuation symbols.

3. After EOF is reached, display the results along with appropriate messages:

    - number of letters   ###
    - number of digits   ###
    - number of spaces   ###
    - number of punctuation symbols   ###

    Output must contain informative messages.

4. Compile, test, and debug thoroughly. Test your program both with input from the keyboard and input redirection (taking input from a file).

Submit lab4a.c and lab4b.c on Canvas.