EL2208 Problem Solving with C Lab. Lab #9

Introduction to reading character data from an input file.

As usual, use praktikum.ee.itb.ac.id for working and writing the program.

This lab will provide an introduction to reading character data from an input file. This lab is also an exercise on using character functions defined in **ctype.h** library. The data file is going to be accessed with the **fopen/fscanf/fclose** commands. The program will open the file called **lab9.in**, read the data out of it character-by-character until the end-of-file (EOF) character is read. Count the number of characters, the number of words and the number of lines in the file.

Every item read from the file will be considered a character; e.g. numbers, punctuation, upper- and lower-case letters, whitespace, newlines, etc. Use a function that accept this character and this function will count the number of characters, the number of words and the number of lines. The word counter will be incremented when a space, a tab or a newline is read. The number of lines in the file will be incremented each time a newline character is read. Use the function prototype

void count_char(char ch, int *nchar, int *nwords, int *nlines);

Print the number of characters, the number of words and the number of lines found in the file as shown:

```
Number of Characters: 68
Number of Words:      14
Number of Lines:       4
```

The input file is in the **labs** subdirectory on **ftp://praktikum.ee.itb.ac.id**. Use anonymous FTP to retrieve the file called **lab9.in**.

Show your lab instructor your code when you are done.

Submit your code using perl submitter.