

Lab1: Write a program to count number of lines, tabs, spaces, words, characters from a given text file.

Code:

```
% {
    # include<stdio.h>
int lc=0,tc=0,sc=0,wc=0,cc=0;
% }
%%
[^\t\n]+    {cc+=yyleng; wc++;}
[ ]        {cc++;sc++;}
[\t]       {cc++; tc++;}
\n         {cc++; lc++;}
%%
main()
{
yyin = fopen("a1.txt","r");
yyout=fopen("a2.txt","w");
yylex();
fclose(yyin);
fclose(yyout);
}
int yywrap()
{
fprintf(yyout,"no. of lines =%d\n",lc);
fprintf(yyout,"no. of tabs=%d\n",tc);
fprintf(yyout,"no. of characters = %d\n",cc);
fprintf(yyout,"no. of spaces = %d\n",sc);
fprintf(yyout,"no. of words=%d\n",wc);
return 1;
}
```

OUTPUT:

```
~$ lex first.l
~$ ls
2023-05-03-file-1.term  a.out  a2.txt  first.l  lex.yy.c
~$ gcc lex.yy.c
first.l:11:1: warning: return type defaults to 'int' [-Wimplicit-int]
   11 | main()
      | ~~~~
~$ ./a.out > a2.txt
This is the output of the first practical      with a tab.
```

```
a2.txt
1  no. of lines =1
2  no. of tabs=1
3  no. of characters = 54
4  no. of spaces = 9
5  no. of words=11
6
```