Experiment - 3 WAP to count the no of words, character, lines, using lex

Name :   **Rollno   :**
Class :   TE.CO   **Batch   :**
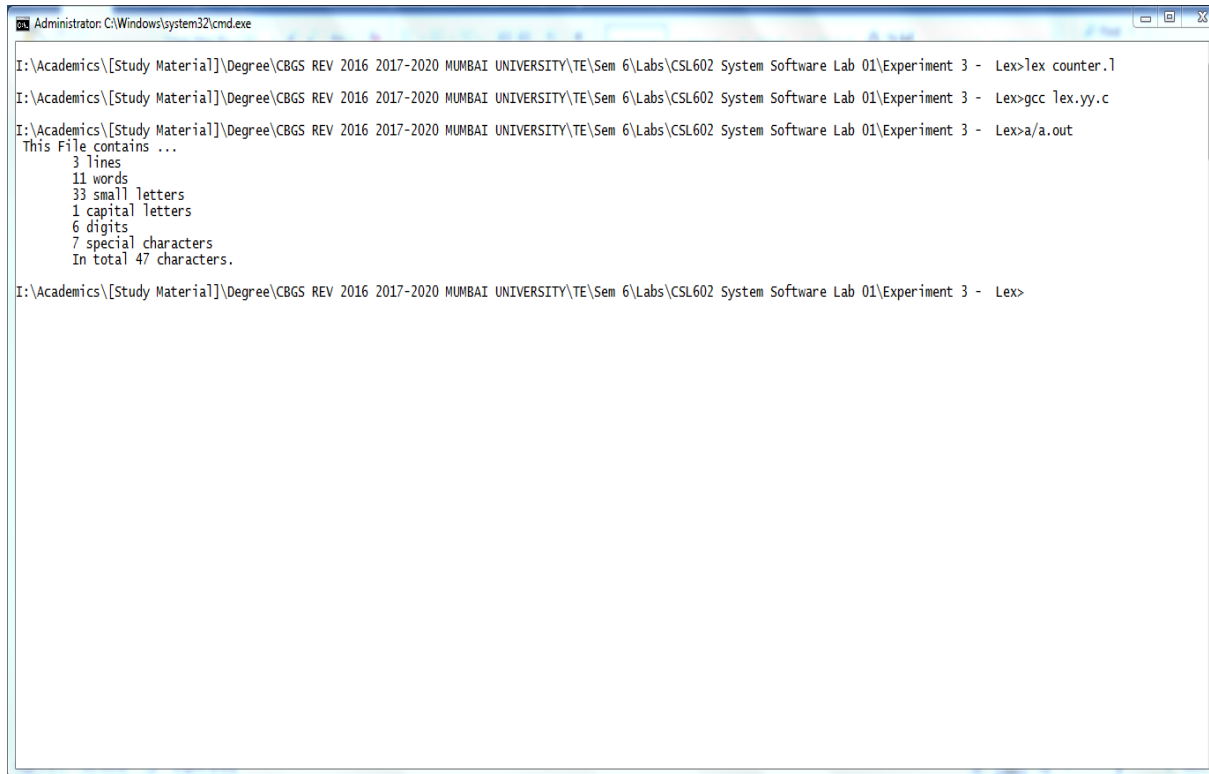
#Source code for counter.l

```
%{
#include<stdio.h>                              //section 1 including header files
//declaring variable and using as pointer value
int lines=0, words=0,s_letters=0,c_letters=0, num=0, spl_char=0,total=0;
%}
%%                                             //end of 1 section

\n { lines++; words++;}                        //logic for the last word and each line
[a-z] s_letters++;                             //if any small case letter is found
[A-Z] c_letters++;                             //if any capital letters are found
[.@#$!%^&*()><?~`"""";?:] spl_char++;          //logic for special character
[0-9] num++;                                   //logic for number from 0 to 9
[ \t]+ words++;                                //if any single whitespace or tabspace is found
%%                                             //end of 2nd section

int main(void)
{
yyin= fopen("input.txt","r");  //yyin is a input stream pointer opening input.txt in readmode
yylex();                        //used to invoke lexer
total=s_letters+c_letters+num+spl_char;
printf(" This File contains ...");
printf("\n\t%d lines", lines);
printf("\n\t%d words",words);
printf("\n\t%d small letters", s_letters);
printf("\n\t%d capital letters",c_letters);
printf("\n\t%d digits", num);
printf("\n\t%d special characters",spl_char);
printf("\n\tIn total %d characters.\n",total);     //displaying total number values
}

int yywrap()                                   //called when EOF
{
return(1);
}
```

#Content of input.txt

This   is the input for!!!!
the   lex program with @#$
123456

#Output


```
Administrator: C:\Windows\system32\cmd.exe

I:\Academics\[Study Material]\Degree\CBGS REV 2016 2017-2020 MUMBAI UNIVERSITY\TE\Sem 6\Labs\CSL602 System Software Lab 01\Experiment 3 - Lex>lex counter.l

I:\Academics\[Study Material]\Degree\CBGS REV 2016 2017-2020 MUMBAI UNIVERSITY\TE\Sem 6\Labs\CSL602 System Software Lab 01\Experiment 3 - Lex>gcc lex.yy.c

I:\Academics\[Study Material]\Degree\CBGS REV 2016 2017-2020 MUMBAI UNIVERSITY\TE\Sem 6\Labs\CSL602 System Software Lab 01\Experiment 3 - Lex>a/a.out
 This File contains ...
        3 lines
        11 words
        33 small letters
        1 capital letters
        6 digits
        7 special characters
        In total 47 characters.

I:\Academics\[Study Material]\Degree\CBGS REV 2016 2017-2020 MUMBAI UNIVERSITY\TE\Sem 6\Labs\CSL602 System Software Lab 01\Experiment 3 - Lex>
```