1.Lex program to count the number of comment lines (multi line comments or single line) in a program. Read the input from a file called input.txt and print the count in a file called output.txt %{

#include <stdio.h>

int cc=0;

%}

%x CMNT

%%

"/\*" {BEGIN CMNT;}

<CMNT>. ;

<CMNT>"\*/" {BEGIN 0; cc++;}

%%

int yywrap() { }

int main(int argc, char \*argv[])

{

if(argc!=3)

{

printf("Usage : %s <scr\_file> <dest\_file>\n",argv[0]);

return 0;

}

yyin=fopen(argv[1],"r");

yyout=fopen(argv[2],"w");

yylex();

printf("\nNumber of multiline comments = %d\n",cc);

return 0;

}



2. Write a program in LEX to recognize Floating Point Numbers. Check for all the following input cases

%{

#include<stdio.h>

int cnt=0;

%}

sign [+|-]

num [0-9]

dot [.]

%%

{sign}?{num}\*{dot}{num}\* {printf("Floating point no.");cnt=1;}

{sign}?{num}\* {printf("Not Floating point no.");cnt=1;}

%%

int yywrap()

{

}

int main()

{

yylex();

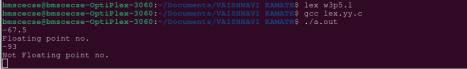
if(cnt==0){

printf("Not floating pnt no.");

}

return 0;

}



3. Write a program to read and check if the user entered number is signed or unsigned using appropriate meta character

%{

#include<stdio.h>

int cnt=0;

%}

sign [+|-]

num [0-9]

dot [.]

%%

{sign}{num}\*{dot}\*{num}\* {printf("Signed no.");cnt=1;}

{num}\*{dot}\*{num}\* {printf("Unsigned no.");cnt=1;}

%%

int yywrap()

{

}

int main()

{

yylex();

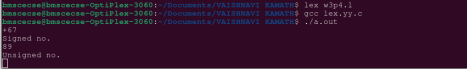
if(cnt==0){

printf("Not floating pnt no.");

}

return 0;

}



4. Write a program to check if the input sentence ends with any of the following punctuation marks ( ? , fullstop , ! )

%{

#include<stdio.h>

int cnt=0;

%}

punc [?|,|.|!]

chars [a-z|A-Z|0-9|" "|\t]

%%

{chars}\*{punc} {printf("Sentence ends with punc");}

{chars}\* {printf("Sentence does not end with punc");}

%%

int yywrap()

{

}

int main()

{

yylex();

return 0;

}



5.

%{

#include<stdio.h>

int cnt=0;

%}

chars [a-z|A-Z|0-9]

check [A|a|AN|An|THE|The]

%%

{check}+{chars}\* {printf("Begins with %s",yytext);}

{chars}\* {printf("Invalid");} %%

int yywrap()

{

}

int main()

{

yylex();

return 0;

}