

Experiment -31

Develop a lexical Analyzer to identify positive and negative numbers as input using lexical program.

Program:

```
%{
#include <stdio.h>

%}

%%

[+-]?[0-9]+    {
    if(yytext[0] == '-')
        printf("%s is a Negative Number\n", yytext);
    else
        printf("%s is a Positive Number\n", yytext);
}

[ \t\n]+      ; /* Ignore spaces/new lines */

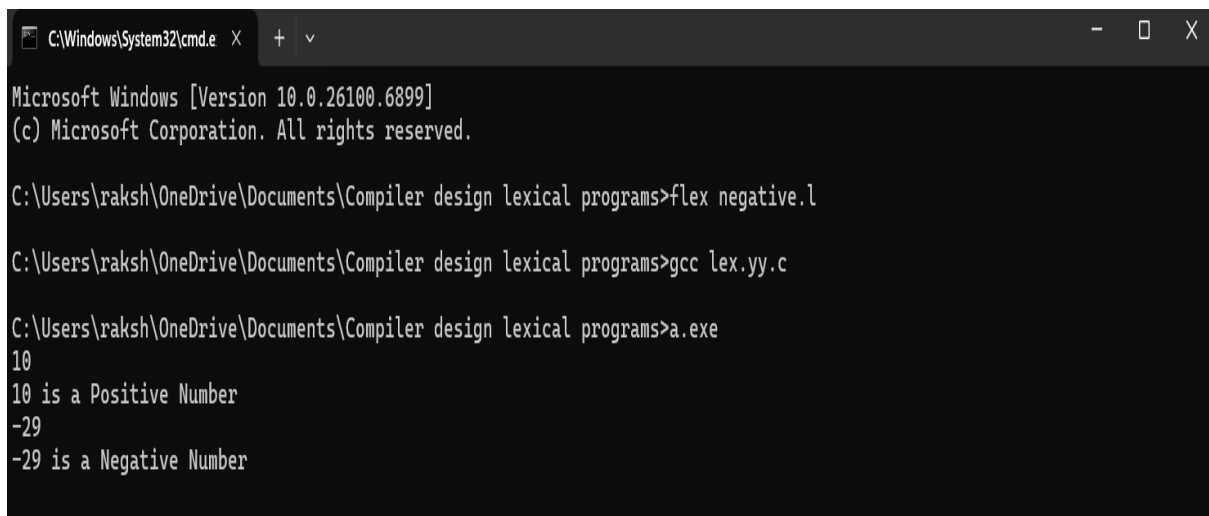
.             { printf("%s is not a number\n", yytext); }

%%

int main()
{
    yylex();
    return 0;
}

int yywrap()
{
    return 1;
}
```

Output:



```
C:\Windows\System32\cmd.exe X + v
Microsoft Windows [Version 10.0.26100.6899]
(c) Microsoft Corporation. All rights reserved.

C:\Users\raksh\OneDrive\Documents\Compiler design lexical programs>flex negative.l

C:\Users\raksh\OneDrive\Documents\Compiler design lexical programs>gcc lex.yy.c

C:\Users\raksh\OneDrive\Documents\Compiler design lexical programs>a.exe
10
10 is a Positive Number
-29
-29 is a Negative Number
```