19CSE401 - Compiler Design

Lab Sheet 2

S Abhishek

AM.EN.U4CSE19147

```
%option noyywrap
%{
        #include <stdlib.h>
        #include <stdio.h>
%}
number [0-9]+
op [+|_|*|%]
word [a-z][a-z 0-9]*
%%
{number} {printf("number");}
{op} {printf("operator");}
{word} {printf("word");}
%%
 int main()
{
        yylex();
        return 1;
}
```

```
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 ○ lex 1.l
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 ○ cc lex.yy.c
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 ○ ./a.out
abhishek 19147 +
Word  Number  Operator
abhishek
Word
Abhishek
AWord
+ _ * %
Operator  Operator  Operator  Operator
19147
Number
```

2. Do a program to identify the Keywords, operators and Symbols in the C program

```
%option noyywrap

%{
	#include <stdlib.h>
	#include <stdio.h>
%}

%%

[\n] {printf("\n\nEnter the Input : ");}

auto|double|int|struct|break|else|long|switch|case|enum|register|
typedef|char|extern|return|union|continue|for|signed|void|do|if|
static|while|default|goto|sizeof|volatile|const|float|short {printf("Keyword ");}

[+-/*%=] {printf("Operator ");}

[,;!~$&>@.:\?^<(){}#] {printf("Symbol ");}

%%

 int main()
{
	yylex();
	return 1;
}
```

```
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 o lex 2.l
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 o cc lex.yy.c
root at Abhishek in /mnt/h/Compiler Design/Lab/Lab 2
 o ./a.out
```

```
Enter the Input : int float +
Keyword  Keyword  Operator

Enter the Input : Abhi + - % #
Abhi Operator  Operator  Operator  Symbol

Enter the Input : int float double _ ( )
Keyword  Keyword  Keyword  _ Symbol  Symbol

Enter the Input : if { } else { }
Keyword  Symbol  Symbol  Keyword  Symbol  Symbol

Enter the Input : Abhishek 19147
Abhishek 19147
```

Thankyou!!