

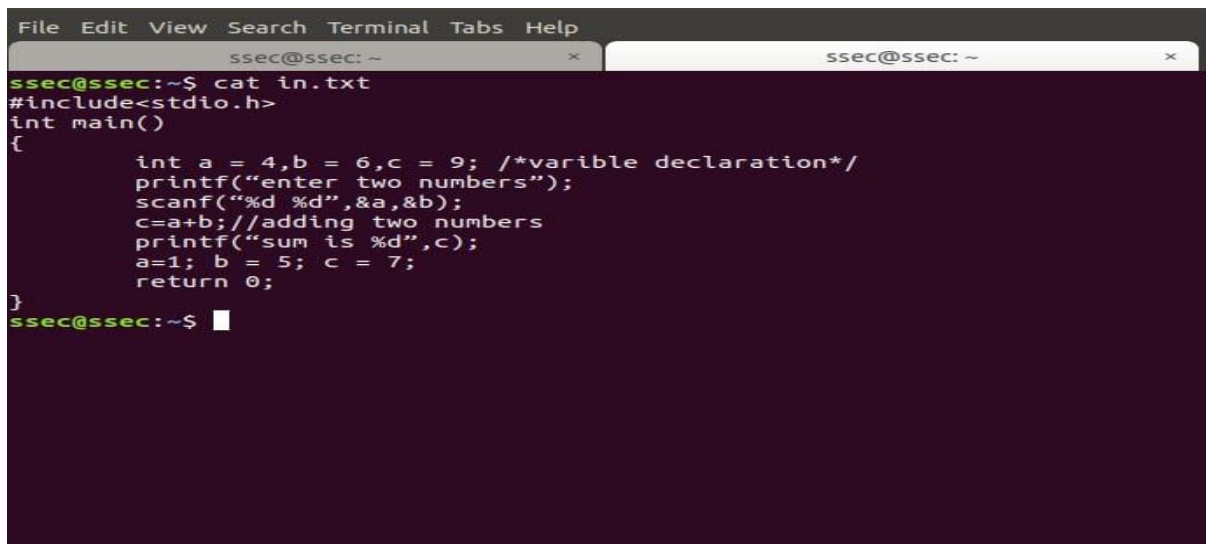
PRACTICAL-8

AIM : Implement following programs using LEX.

1. Write a Lex program to print out all numbers from the given file.

```
%{  
  
%}  
  
%%  
  
[0-9]* {printf("%s\n", yytext); }  
  
. ; // else do nothing  
  
%%  
  
int yywrap(){}  
  
int main(int argc, char*argv[])  
{  
  
    // Open tags.txt in read mode  
  
    extern FILE *yyin = fopen("tags.txt","r");  
  
    // The function that starts the analysis  
  
    yylex();  
  
    return 0; }  

```



The screenshot shows a terminal window with a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and two tabs labeled 'ssec@ssec: ~'. The terminal content shows the command 'cat in.txt' being executed, displaying the following C code:

```
ssec@ssec:~$ cat in.txt  
#include<stdio.h>  
int main()  
{  
    int a = 4,b = 6,c = 9; /*variable declaration*/  
    printf("enter two numbers");  
    scanf("%d %d",&a,&b);  
    c=a+b;//adding two numbers  
    printf("sum is %d",c);  
    a=1; b = 5; c = 7;  
    return 0;  
}  
ssec@ssec:~$
```

```

File Edit View Search Terminal Tabs Help
ssec@ssec: ~
Desktop  htmltags.l  nikto  Release.key  Videos
ssec@ssec:~$ gedit htmltags.l
ssec@ssec:~$ lex htmltags.l
ssec@ssec:~$ cc lex.yy.c
ssec@ssec:~$ ./a.out

4
6
9
1
5
7
8
ssec@ssec:~$

```

2. Write a Lex program to printout all HTML tags in file.

```

% {
% }
%%

"<[^>]*> {printf("%s\n", yytext); } /* if anything enclosed in these <> occur print text*/
. ; // else do nothing
%%

int yywrap(){}

int main(int argc, char*argv[])
{
    // Open tags.txt in read mode
    extern FILE *yyin = fopen("tags.txt","r");

    // The function that starts the analysis
    yylex();

    return 0; }

```

```

ssec@ssec: ~
File Edit View Search Terminal Help
ssec@ssec:~$ ls
addline.l  Documents      in.txt      out.txt      tags.txt      w3af
a.out      Downloads      lex.yy.c    Pictures     Templates
comment.l  examples.desktop Music        Public       testtext.c
Desktop    htmltags.l     nikto       Release.key  Videos
ssec@ssec:~$ cat tags.txt
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
ssec@ssec:~$ █

```

```

ssec@ssec:~$ lex htmltags.l
ssec@ssec:~$ cc lex.yy.c
ssec@ssec:~$ ./a.out
<html>

<body>

<h1>
</h1>

<p>
</p>

</body>
</html>

```

3. Write a Lex program which adds line numbers to the given file and display the same onto the standard output.

```

%{
int line_number = 1; // initializing line number to 1
%}
%%
{line} { printf("%10d %s", line_number++, yytext); }
%%

```

```

int yywrap(){ }

```

```

int main(int argc, char*argv[])
{
extern FILE *yyin;
yyin = fopen("testtest.c", "r");
yylex();
return 0;
}

```

```
}  
File Edit View Search Terminal Help  
jerry@ubuntu:~$lex addline.l  
jerry@ubuntu:~$gcc lex.yy.c  
jerry@ubuntu:~$./a.out  
1 #include<stdio.h>  
2 int main()  
3 {  
4     int a,b,c; /*variable declaration*/  
5     printf("enter two numbers");  
6     scanf("%d %d",&a,&b);  
7     c=a+b;//adding two numbers  
8     printf("sum is %d",c);  
9     return 0;  
10 }  
jerry@ubuntu:~$
```