



**S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT  
& RESEARCH, NAGPUR.**

**Practical No. 0(Pre Lab)**

**AIM:** (a) Write and execute a C Program to demonstrate the use of vi editor and GNU C Compiler.

(b) Write a simple program to demonstrate the use LEX tool on Linux.

**Name of Student:** Shrutika Pradeep Bagdi

**Roll No.:** CS22130

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**Date of Performance:**

**Date of Submission:**

**AIM:** (a) Write and execute a C Program to demonstrate the use of vi editor and GNU C Compiler.

(b) Write a simple program to demonstrate the use LEX tool on Linux.

**OBJECTIVE/EXPECTED LEARNING OUTCOME:**

- To get acquainted with vi editor and C compiler on Linux.
- To understand the working and commands of LEX tool

**THEORY:**

1) Introduction of vi editor and commands

2) Commands for compiling and running c compiler

3) Introduction of LEX tool

4) LEX file format

5) Commands to run a LEX program

**CODE:**

```
#include<stdio.h>
int main()
{
    printf("Hello World");
    return 0;
}
```

```
Hello Worldcsc15@linux-p2-1272il:~/CS22130$ vi prelab.lex
%{
#include<stdio.h>
%}
[a-z]* {printf("You have entered a alphabe");}
%}

int yywrap(void){}

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

### OUTPUT:

```
csc15@linux-p2-1272il:~/CS22130$ vi sample.c
csc15@linux-p2-1272il:~/CS22130$ cc sample.c
csc15@linux-p2-1272il:~/CS22130$ ./a.out
Hello Worldcsc15@linux-p2-1272il:~/CS22130$
```

```
Hello Worldcsc15@linux-p2-1272il:~/CS22130$ lex prelab.lex
csc15@linux-p2-1272il:~/CS22130$ cc lex.yy.c
csc15@linux-p2-1272il:~/CS22130$ ./a.out
a
You have entered a alphabet
```

### CONCLUSION:

### DISCUSSION AND VIVA VOCE:

- Q 1: How many modes are present in vi editor?
- Q 2: Give vi commands and examples.
- Q 3: which phase of compiler is associated with LEX tool? Why?
- Q 4: What is the use of regular expression in LEX?

### REFERENCE:

- <https://man7.org/linux/man-pages/man1/lex.1p.html>
- Book: lex & yacc by John Levine, Doug Brown, Tony Mason—2nd ed.