

# Assignment-3

-210001059

Q-2) Input:

```
Lab-3 > ≡ input2.txt
1 I am Rohit Dhanotia, GDSC Lead at IIT Indore for session 2023-24.
```

Output:

```
● rohit@Robin-2223:~/Desktop/CT-Lab/Lab-3$ ./que2 < input2.txt
Number of words: 13
```

Q-3) Input:

```
≡ que3.l    ≡ input3.txt ×
Lab-3 > ≡ input3.txt
1 // Hi, I am a single-line comment
2
3 /*
4 Hi, I am a multi-line comment
5 */
6
```

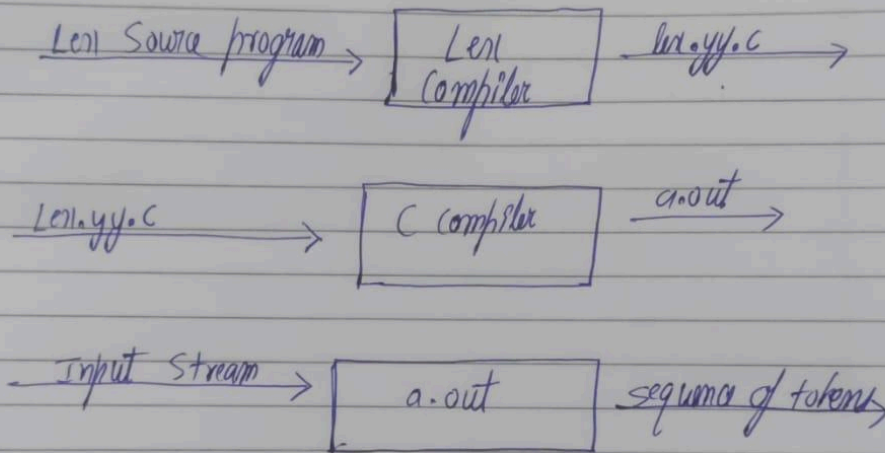
Output:

```
Number of comments: 2
● rohit@Robin-2223:~/Desktop/CT-Lab/Lab-3$ lex que3.l
● rohit@Robin-2223:~/Desktop/CT-Lab/Lab-3$ cc lex.yy.c -o que3 -ll
● rohit@Robin-2223:~/Desktop/CT-Lab/Lab-3$ ./que3 < input3.txt

Hi, I am a multi-line comment
*/
Number of comments: 2
○ rohit@Robin-2223:~/Desktop/CT-Lab/Lab-3$
```

Q-1)

Ans) LEX is a tool or computer program that generates Lexical Analysers (converts the stream of characters into tokens). The Lex tool itself is a compiler. The Lex compiler takes the input and transforms that input into input patterns. It is commonly used with YACC (Yet Another Compiler Compiler).



★ Lex File Format  
→ A lex file consists of 3 parts separated by %%

Declarations

%%

Translation rules

%%

Auxiliary procedures

Example:

number [0-9]

%%

if {return (IF);}

%%

int numberSum()