

Lab Practice Session # 3

Course Title: Compiler Construction Lab (CSTE-4106)

1. Write a C program to construct recursive descent parsing for the following grammar:

$E \rightarrow TE'$

$E' \rightarrow +TE | N$

$T \rightarrow FT'$

$T' \rightarrow *FT' | N$

$F \rightarrow (E) | ID$

Where N is a null character.

Sample Input/Output

Input:	Output:
Enter a string: (a+b)*c	String is accepted.
Enter a string: a c+d	String is not accepted.

2. Write a C program to compute FIRST and FOLLOW for the following grammar:

$S \rightarrow iCtSS'$

$S' \rightarrow eS | N$

Where N is a null character.

Assignment on Syntax Analysis:

3. Write a program to construct predictive parsing table for the following grammar?

$S \rightarrow iCtSS'$

$S' \rightarrow eS | N$

Where N is a null character.

4. Write a C program to construct LL (1) parsing for the following grammar:

$E \rightarrow TE'$

$E' \rightarrow +TE | N$

$T \rightarrow FT'$

$T' \rightarrow *FT' | N$

$F \rightarrow (E) | ID$

Where N is a null character.