

Compiler Design Lab

Assignment #1

1. Write a program in C/C++/java to read the productions of the grammar from an input file. The input file should also include the set of terminals. The program should also take as input a string of terminals and derive a parse tree using the grammar from the input file. The program should display the derived parse tree. If it is not possible to derive a parse tree using the grammar for the input string, the program should throw an error message.
2. Write a program in C/C++/java to read the productions of the grammar from an input file. The input file should also include the set of terminals. The program should remove the left recursion from the productions of the grammar and write the resulting productions into an output file.
3. Write a program in C/C++/java to read the productions of the grammar from an input file. The input file should also include the set of terminals. The program should also take as input a string of terminals and parse the string using the **Predictive Parsing Technique** and the grammar from the input file without generating the parse table. The program should display the derived parse tree. If it is not possible to derive a parse tree using the grammar for the input string, the program should throw an error message.