

CS321: Assignment 5

Date: 29/08/2016

Given a CFG, the process to find FIRST for any grammar symbol (terminal or non terminal) is already discussed in class. The process to find FOLLOW will be discussed tomorrow.

Your next lab assignment is to write a program to find FIRST and FOLLOW for any grammar symbol (terminal or non-terminal) from a given CFG.

The input of your program should be:

1. CFG and
2. a symbol X (terminal or non terminal).

The output should be FIRST(X) and FOLLOW(X).

Important Points:

1. You have to decide yourself about the data structure required for representation of CFG. Use a standard data structure for CFG as it will be required for next assignment too. It will be better to create a separate function to read CFG from an input file.
2. There should be separate functions in your program for FIRST and FOLLOW.
3. Read the concept of FIRST and FOLLOW from book.
4. No doubts will be cleared regarding the implementation but any doubts regarding the concept of FIRST and FOLLOW will be explained.