

Compiler Design

Final Assignment

Vansh Bhatnagar

BT20HCS111

Q. Simulate the Bottom-up parser. While parsing the step by step parsing should be demonstrated. Use CLR or LALR.

Bottom Up parsing using LALR

The bottom-up parsing method constructs the node in the syntax tree in post-order: the top of a subtree is constructed after all of its lower nodes have been constructed. When a bottom-up parser constructs a node, all its children have already been constructed and are present and known.

An LALR parser or Look-Ahead LR parser is a simplified version of a Canonical LR parser.

This tool takes LR(0) grammar as input and produces a LALR parsing table. Then any expression can be checked against the given grammar

This tool displays following attributes of given grammar :

1. Terminals and Non Terminals
2. First
3. LR(1) states
4. LALR parser
5. Parsing Table
6. Bottom Up parsing step wise