The algorithm applies the rule of parenthesis precedence. The user input is first split into chunks or tokens. The algorithm then first parses and builds a grammar in order to

Validate the input. This functionality is performed by the first function which returns a Boolean true if the grammar is correct. If the user input does not qualify on the grammar the algorithm raises an exceptional error indication that the

Formula is not well formed. This function is "push\_nxtup". The function takes two parameters, a stream list and token variables.

Various rules such as Not, and, or, and bitwise ~n are checked when parsing the string input. The output is filtered in order to prevent double occurrence of opposite Booleans.