

CS-471L Compiler Construction

Rubrics Open Ended Lab (Fall 2024)

Task 1: Design a Syntax Analyzer for if-else Statements and Expressions.

[CLO 3, Marks = 25]

Component	Marks	High	Medium	Low
Background Knowledge	2	Good Knowledge and all the questions were answered correctly.	Adequate knowledge and more than half of the questions were answered correctly.	Sufficient knowledge and less than half of the questions were answered correctly.
Grammar Implementation	5	Grammar is correctly implemented, including if-else and expressions with correct precedence and associativity.	Grammar is implemented correctly, but minor issues with precedence or associativity.	Major errors or incomplete grammar implementation.
Parser Design / Logic Building	10	LL(1) or recursive descent parser is fully functional, correctly parses valid input, and handles errors gracefully.	Parser handles basic cases but struggles with complex expressions or nesting.	Parser fails to parse most inputs or has significant logical flaws.
Error Handling	5	Clear, informative error messages with specific details about the location and type of syntax errors.	Basic error messages, but unclear or unhelpful for more complex syntax errors.	Little to no error handling, or messages are too vague to be useful.
Viva-voce / Questions	3	All the questions were answered.	More than half of the questions were answered.	Less than half of the questions were answered.