



COMPILER CONSTRUCTION LAB TERMINAL

NAME:

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FA20-BCS-026

CLASS:

BCS-7B

SUBMITTED TO:

SIR BILAL HAIDER

DATE:

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SEMANTIC ANALYZER:

- **QUESTION NO 05:**

What challenges your faces during the project?

- **ANSWER:**

Implementing complex semantic rules:

Handling semantic rules beyond basic operations can be challenging.

This includes function calls, loops, conditional statements, and type checking.

Ensuring correct code execution involves careful rule implementation.

LEXICAL ANALYZER:

QUESTION NO 05:

Challenges faced during this project?

ANSWER:

- **Regular Expression Complexity:**

Crafting accurate and efficient regular expressions for token recognition can be challenging. The complexity of expressions increases with the diversity of the input language, and striking the right balance between specificity and generality is crucial.

- **Ambiguities in Token Definitions:**

Defining tokens with potential ambiguities can lead to challenges. For example, distinguishing between unary and binary operators or handling numbers with decimal points requires careful consideration to avoid misinterpretations.

- **Whitespace and Comments Handling:**

Managing whitespace and comments appropriately is often overlooked but essential. Incorrect handling of these elements can affect tokenization and lead to unexpected behavior in the interpreter.