**COMSATS INSTITUTE OF INFORMATION AND TECHONOLOGY ISLAMABAD ATTOCK CAMPUS**

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**LAB TERMINAL**

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**Course:** Compiler Construction

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**1: Brief of the project**

**Project Brief:**

Brainfork Compiler in C++

**Description:**

The project is a Brainfork compiler implemented in C++. Brainfork (actually it’s another name but I used fork for it) is an esoteric programming language with minimalistic syntax.

**Components:**

* **Lexer:** Tokenizes input Brainfork code, identifying commands and symbols.
* **Parser:** Generates an Abstract Syntax Tree (AST) from the tokenized code, representing its structure.
* **Brainfork Compiler:** Transforms the AST into executable Brainfork code.

User Interaction: Users input Brainfork code line by line through the console. The program processes the input, generates an AST, and produces the corresponding Brainfork code.

Output: The program displays the generated AST and Brainfork code, providing insights into the code structure.