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Reg #   **FA21-BCS-009**

Course Name: **Compiler Construction**

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Lab Terminal

Question 3: Give examples of code optimizations you used in your mini compiler.

Answer: Explanation of the Input

- **Namespace and Class Declaration:** The program is written in C# with a namespace and a Program class.

- **Main Method:** The Main method serves as the entry point of the program.

- **Symbol Table Entries:**

  o The program simulates adding variable entries to a symbol table for x, y, and z:

    - x is assigned an integer value 10.

    - y is assigned a floating-point value 3.14.

    - z is assigned a character value 'c'.

- **Symbol Table Printing:** The symbol table is printed to display the variables and their associated data types and values.

- **Syntax Analysis:** A sample line of C code (int main() { int x = 10; }) is passed to the Syntax Analyzer for analysis.

Output of the Mini C Compiler:

```
Mini-C Compiler


Symbol Table:
Name: x Datatype: 0        Value: 10
Name: y Datatype: 1        Value: 3.14
Name: z Datatype: 2        Value: c

Testing Syntax Analyzer:
Analyzing syntax for input:
int main() { int x = 10; }
Syntax analysis complete.

Program execution completed.
Press any key to continue . . . |
```