

1. Differentiate between
 - a. Pseudo Code vs Algorithm
 - b. Linker Error vs Logical Error
 - c. Syntax Error vs Semantic Error
 - d. Variable declaration vs initialization
 - e. Postfix vs Prefix Operator
2. Discuss Short-Circuit operator with example
3. What goes behind the scene when you attempt to get an output from source code in C++?
Elaborate the process steps with the help of diagram
4. Create a **menu-driven program** in C++ that performs operations like **Finding Maximum, Minimum, Square, and Square Root of numbers** – hint use **Switch statement**
5. **Write a program** to assign a grade (A, B, C, D, and E) based on marks input by the user using **if-else** conditions
6. **Draw a flowchart to find out the greatest among three numbers**
7. **What will be the output of the program**

```
#include <iostream>
using namespace std;

int main() {
    int i = 5;
    int prefixResult, postfixResult;

    prefixResult = ++i;
    cout << "Prefix Increment: " << endl;
    cout << "Value of i: " << i << endl;
    cout << "Result of Prefix Increment: " << prefixResult << endl;

    i = 5;

    postfixResult = i++;
    cout << "Postfix Increment: " << endl;
    cout << "Value of i: " << i << endl;
    cout << "Result of Postfix Increment: " << postfixResult << endl;

    return 0;
}
```