write non recursive and recursive program to calculate nth term fibonacci number in cpp.

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

int fibonacciIterative(int n) {
    if (n <= 1)
        return n;

    int prev = 0, curr = 1, next;
    for (int i = 2; i <= n; i++) {
        next = prev + curr;
        prev = curr;
        curr = next;
    }
    return curr;
}

int main() {
    int n;
    cout << "Enter the term number (n): ";
    cin >> n;
    cout << "Fibonacci term " << n << " is: " << fibonacciIterative(n) << endl;
    return 0;
}
#include <iostream>
using namespace std;

int fibonacciRecursive(int n) {
    if (n <= 1)
        return n;
    return fibonacciRecursive(n - 1) + fibonacciRecursive(n - 2);
```

```
}

int main() {
    int n;
    cout << "Enter the term number (n): ";
    cin >> n;
    cout << "Fibonacci term " << n << " is: " << fibonacciRecursive(n) << endl;
    return 0;
}
```

Approach	**Time Complexity**	**Space Complexity**
Iterative	O(n)	O(1)
Recursive	O(2^n)	O(n)