Logical:

```cpp
#include <iostream>
#include <string>
using namespace std;
int firstNonRepeatingChar(string s) {
    int freq[26] = {0};
    for (int i = 0; i < s.length(); i++)
        freq[s[i]]++;
    for (int i = 0; i < s.length(); i++)
        if (freq[s[i]] == 1)
            return i;
    return -1;
}
int main() {
    string str = "programming";
    int index = firstNonRepeatingChar(str);
    cout << "First non-repeating character index: " << index << endl;
    return 0;
}
```

Syntax:

```cpp
#include <iostream>
using namespace std;
int main() {
    const int *ptr;
    *ptr = 10;
    cout << *ptr << endl;
    return 0;
}
```