Logical Explanation of the Code

Introduction:

This C++ program demonstrates how pointers modify a variable's value.

Explanation:

1. **Initialization:**
    - int val = 12; → Declares an integer val.
    - int *ptr = &val; → Pointer ptr stores val's address.
2. **Modification:**
    - cout prints val and *ptr (both 12).
    - *ptr = 20; updates val.
    - cout prints updated values (20).

Output:

```
Value of the integer: 12
Value of the pointer: 12
After modifying the value through the pointer: *ptr = 20
Interger: 20
Pointer: 20
```

Conclusion:

Pointers allow indirect modification of a variable.

Code:

```
#include <iostream>

using namespace std;


int main()

{

   int val = 12;

   int *ptr = &val;
```

```
    cout << "Value of the integer: " << val
        << "\nValue of the pointer: " << *ptr
        << "\nAfter modifying the value through the pointer: *ptr = 20\n";

    *ptr = 20;

    cout << "Interger: " << val;
    cout << "\nPointer: " << *ptr;


    return 0;

}
```