C++ Return by Reference

In C++ Programming, not only can you pass values by reference to a function but you can also return a value by reference.

**Example: Return by Reference**

#include <iostream>

using namespace std;

// Global variable

int num;

// Function declaration

int& test();

int main()

{

test() = 5;

cout << num;

return 0;

}

int& test()

{

return num;

}

**Output**

5

In program above, the return type of function test() is int&. Hence, this function returns a reference of the variable num.

The return statement is return num;. Unlike return by value, this statement doesn't return value of num, instead it returns the variable itself (address).

So, when the **variable** is returned, it can be assigned a value as done in test() = 5;

This stores 5 to the variable num, which is displayed onto the screen.