

Lesson 2:
Introduction to the C++ Language

SEARCH

RESOURCES

CONCEPTS

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27. CODE: Formatting the Printed Bo...

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29. Great Work!

Functions

SEND FEEDBACK

Functions

In the cell below, there is a simple function to add two numbers and return the result. Test the code below, and click the button for a more in-depth explanation.

In []:

#include <iostream>
using std::cout;

// Function declared and defined here.
int AdditionFunction(int i, int j)
{
 return i + j;
}

int main()
{
 auto d = 3;
 auto f = 7;
 cout << AdditionFunction(d, f) << "\n";
}

Compile & Execute

Explain

Loading terminal (id_d0qs3ky), please wait...

Practice

Now that you've seen how to define and call a function, try this yourself in the cell below with a slightly more complicated example. Your function should accept a vector of ints as its argument and return the sum of all the ints in the vector. If you get stuck, click the solution button for help.

In []:

#include <iostream>
#include <vector>
using std::cout;
using std::vector;

// Define a function "AdditionFunction" here.
// Instead of just two ints, this function should accept a vector<int>
// as the argument, and it should return the sum of all the ints in the vector.

int main()
{
 vector<int> v {1, 2, 3};

 // Uncomment the following line to call your function:
 //cout << AdditionFunction(v) << "\n";
}

Compile & Execute

Show Solution

Loading terminal (id_48n55o), please wait...

Void Return Type

Sometimes a function doesn't need to return anything. For example, a function might simply modify an object that is passed into it, or it might just print to the terminal. If a function doesn't need to return a value, the void type can be used for the return type. Using the function syntax provided above, write a function PrintStrings that takes two strings as arguments and prints both of them. If you are having trouble, click the solution button for help.

In []:

#include <iostream>
#include <string>
using std::cout;
using std::string;

// Write the PrintStrings function here.
void PrintStrings(string a, string b)
{
 cout << a << " " << b << "\n";
}

int main() {
 string s1 = "C++ is ";
 string s2 = "super awesome.";

 // Uncomment the following line to call your function:
 PrintStrings(s1, s2);
}

Compile & Execute

Explain

Loading terminal (id_cn1d9q), please wait...

Loading [MathJax]/extensions/Safe.js

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