



# Declaring a Function

In this lesson, we will go through the basic syntax for declaring a function in C++.

We'll cover the following



- Function creation
  - Function declaration
  - return\_type
  - function\_name
  - function\_parameters
  - Example program

## Function creation#

In C++, function creation consists of the following two steps:

- Function declaration
- Function definition

## Function declaration#

Function declaration informs the compiler about:

- The return type of function
- The function name
- The number of parameters and their data types.

The basic syntax for declaring a function in C++ is:



`return_type function_name ( function_parameters ) ;`

## return\_type#

Return type specifies what type of data a function returns in output to the calling point after performing its task.



It is possible for a function to return nothing in output. Such functions have a `void` return type.

## function\_name#

Whenever we declare a function, we give it a unique name. We then use the same name to call it throughout the program.

## function\_parameters#

When we call a function, we pass values to the function parameters. These values are known as **arguments**, or **actual parameters**.



Passing parameters in a function is optional.

## Example program#

Consider the blender example given in the previous lesson

(<https://www.educative.io/collection/page/10370001/6619096843026432/6348964841390080>). Let's write a C++ program to declare a `make_juice` function.

```

1  #include <iostream>
2
3  using namespace std;
4  // Function declaration
5  int make_juice(int water_glass, int fruit);
6  // int make_juice(int , int);
7
8  int main() {
9
10     return 0;
11 }

```



✓ Succeeded

In the above code, we declare our function on **Line No 5**. It tells the compiler that `make_juice` is the name of the function. It takes two `int` values as input parameters and returns an `int` value as an output.



**make\_juice** (



,



);



It is not necessary to give parameter names in the function declaration. You may only declare their data type. You can check this out by uncommenting **Line No. 6** in the above code.



Q Declare a function `number_sum` that takes `num1` and `num2` in input and returns their sum in the output. `num1`, `num2`, and the `sum` can take integer values.

(You can select multiple correct answers)



(/learn)

☐

A) `int number_sum ( int num1 , int num2 )`

Selected Option



B) `int number_sum ( int num1 , int num2 );`

☐

C) `int number_sum ( int , int )`

Selected Option



D) `int number_sum ( int , int );`

Explanation

It is not necessary to give parameter names in the function declaration.

Submit Answer

Reset Quiz ↻

We have just seen how to declare a function in C++. Let's learn about defining a function in the upcoming lesson.