C++ Variables

Variables are containers for storing data values.

In C++, there are different **types** of variables (defined with different keywords), for example:

* int - stores integers (whole numbers), without decimals, such as 123 or -123
* double - stores floating point numbers, with decimals, such as 19.99 or -19.99
* char - stores single characters, such as 'a' or 'B'. Char values are surrounded by single quotes
* string - stores text, such as "Hello World". String values are surrounded by double quotes
* bool - stores values with two states: true or false

Declaring (Creating) Variables

To create a variable, specify the type and assign it a value:

Syntax

*type* *variableName* = *value*;

Where *type* is one of C++ types (such as int), and *variableName* is the name of the variable (such as **x** or **myName**). The **equal sign** is used to assign values to the variable.

To create a variable that should store a number, look at the following example:

Example

Create a variable called **myNum** of type int and assign it the value **15**:

int myNum = 15;  
cout << myNum;

[Try it Yourself »](https://www.w3schools.com/cpp/trycpp.asp?filename=demo_variables_int)

You can also declare a variable without assigning the value, and assign the value later:

Example

int myNum;  
myNum = 15;  
cout << myNum;

[Try it Yourself »](https://www.w3schools.com/cpp/trycpp.asp?filename=demo_variables_int2)