

Variables

In the following lesson, you will be introduced to variables and learn how to declare them in Dart.

We'll cover the following

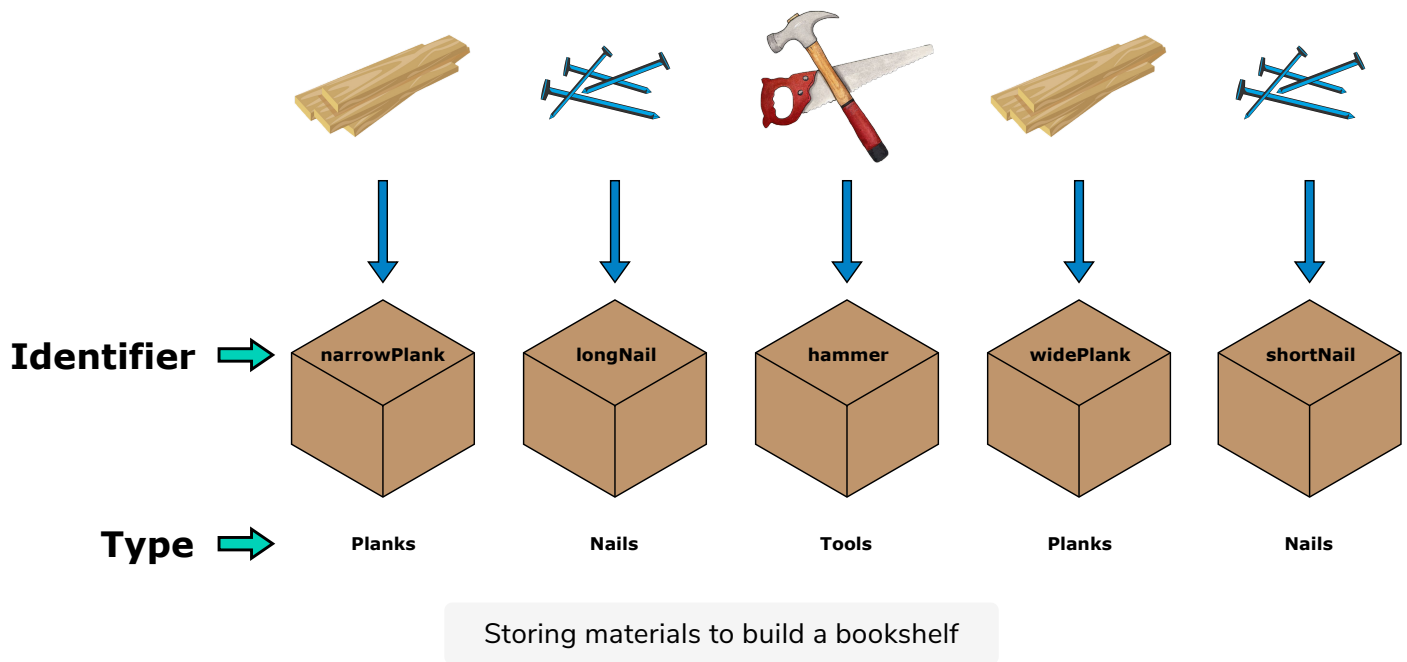


- What Are Variables?
- Declaring a Variable in Dart
- Printing Variables

What Are Variables?

Variables are used for storing information which can then be used by the computer program. Let's look at this concept from a different angle.

Imagine you're building a wooden bookshelf and need planks of wood, nails, and different tools to finish your project. To better organize the material, you decide to group similar items together and store them in boxes. This would allow you better access to each item depending on which item you need and when you need it. You have one box with planks, another with nails, and another with tools. However, there's a problem; you have multiple types of planks, nails, and tools. You have to sort through the right type of box to get the required item. You decide to further divide each box. Multiple boxes can store the same type of item, such as wooden planks, but each box is still unique. There are now two boxes for wooden planks; one with wide planks and another with narrow planks. When you're done dividing all the material into separate boxes, you end up with an abundance of boxes and can't seem to find what you're looking for. Finally, you label each box with a unique name to make each one easier to identify. You now have an organized way to store your material and access it whenever you want.



In the same way, a variable is a small box used to store data. When we *assign* a value to a variable, we are basically putting something in a box. When you declare a variable, you give it a unique name or identifier, define the type of data it can store, and set its initial value.

Let's get back to Dart and see how we can declare a variable.

Declaring a Variable in Dart

Let's look at the syntax of how to declare a variable in Dart.

Each spoken language has a general set of rules for how words and sentences should be structured. These rules are collectively known as the language's syntax. In computer programming languages, syntax serves the same purpose.

dataType **variableName** **=** **Initial Value**

Syntax for declaring a variable in Dart

We start off by mentioning the type of data our variable will hold, such as an integer. Then comes the variable's unique name, followed by an equal sign (=), and the initial value. Don't forget the semicolon at the very end.

It is a Dart styling convention to name variables using lower camel case. In other words, you should capitalize the first letter of each word except the first word, and use no separators, eg., *lowerCamelCase*.

Now, let's map the syntax to the actual code in Dart:

```
main() {  
  int myFirstDartVariable = 5;  
}
```

In the code above, we are declaring a variable with the name `myFirstDartVariable`. `myFirstDartVariable` can store data of type `int` (integer) and is assigned an initial value of `5`.

Printing Variables

The basic syntax for using the `print` statement is as follows:

`print(variableName)`

Now that we have learned how to declare a variable `myFirstDartVariable`; let's learn how to print it.

```
main() {  
  int myFirstDartVariable = 5;  
  print(myFirstDartVariable);  
}
```



In the code snippet above, we simply passed the name of our variable to the `print` statement and in return, the value assigned to the variable, i.e. `5`, was displayed.

Now that we know how to declare variables, let's move on to some basic datatypes.

