## Variables

Variables are containers for storing data values.

## Creating Variables

Python has no command for declaring a variable.

A variable is created the moment you first assign a value to it.

### **Example**[**Get your own Python Server**](https://www.w3schools.com/spaces/)

x = 5  
y = "John"  
print(x)  
print(y)

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_variables1)

Variables do not need to be declared with any particular type, and can even change type after they have been set.

### **Example**

x = 4       # x is of type int  
x = "Sally" # x is now of type str  
print(x)

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_variables2)

## Casting

If you want to specify the data type of a variable, this can be done with casting.

### **Example**

x = str(3)    # x will be '3'  
y = int(3)    # y will be 3  
z = float(3)  # z will be 3.0

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_variables_casting)

## Get the Type

You can get the data type of a variable with the type() function.

### **Example**

x = 5  
y = "John"  
print(type(x))  
print(type(y))

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_variables_type)

You will learn more about [data types](https://www.w3schools.com/python/python_datatypes.asp) and [casting](https://www.w3schools.com/python/python_casting.asp) later in this tutorial.

## Single or Double Quotes?

String variables can be declared either by using single or double quotes:

### **Example**

x = "John"  
# is the same as  
x = 'John'

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_variables7)

## Case-Sensitive

Variable names are case-sensitive.

### **Example**

This will create two variables:

a = 4  
A = "Sally"  
#A will not overwrite a

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