Python Arrays

> **Note:** Python does not have built-in support for Arrays, but Python Lists can be used instead.

Arrays

Arrays are used to store multiple values in one single variable:

Example

Create an array containing car names:

```
cars = ["Ford", "Volvo", "BMW"]
```

Run example »

What is an Array?

An array is a special variable, which can hold more than one value at a time.

If you have a list of items (a list of car names, for example), storing the cars in single variables could look like this:

```
car1 = "Ford";
car2 = "Volvo";
car3 = "BMW";
```

However, what if you want to loop through the cars and find a specific one? And what if you had not 3 cars, but 300?

The solution is an array!

An array can hold many values under a single name, and you can access the values by referring to an index number.

Access the Elements of an Array

You refer to an array element by referring to the *index number*.

Example

Get the value of the first array item:

```
x = cars[0]
```

Run example »

Example

Modify the value of the first array item:

```
cars[0] = "Toyota"
```

Run example »

The Length of an Array

Use the `len()` method to return the length of an array (the number of elements in an array).

Example

Return the number of elements in the `cars` array:

```
x = len(cars)
```

Note: The length of an array is always one more than the highest array index.

Looping Array Elements

You can use the `for in` loop to loop through all the elements of an array.

Example

Print each item in the `cars` array:

```python
for x in cars:
    print(x)
```

Adding Array Elements

You can use the `append()` method to add an element to an array.

Example

Add one more element to the `cars` array:

```python
cars.append("Honda")
```

Removing Array Elements

You can use the `pop()` method to remove an element from the array.

Example

Delete the second element of the `cars` array:

```
cars.pop(1)
```

Run example »

You can also use the `remove()` method to remove an element from the array.

Example

Delete the element that has the value "Volvo":

```
cars.remove("Volvo")
```

Run example »

Note: The `remove()` method only removes the first occurrence of the specified value.

Array Methods

Python has a set of built-in methods that you can use on lists/arrays.

Method	Description
append()	Adds an element at the end of the list
clear()	Removes all the elements from the list
copy()	Returns a copy of the list
count()	Returns the number of elements with the specified value
extend()	Add the elements of a list (or any iterable), to the end of the current list
index()	Returns the index of the first element with the specified value
insert()	Adds an element at the specified position

pop()	Removes the element at the specified position
remove()	Removes the first item with the specified value
reverse()	Reverses the order of the list
sort()	Sorts the list

Note: Python does not have built-in support for Arrays, but Python Lists can be used instead.

COLOR PICKER
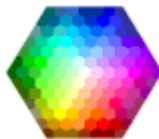
HOW TO

Tabs
Dropdowns
Accordions
Side Navigation
Top Navigation
Modal Boxes
Progress Bars
Parallax
Login Form
HTML Includes
Google Maps
Range Sliders
Tooltips
Slideshow
Filter List
Sort List

SHARE

Top 10 Tutorials

Top 10 References

W3.CSS Reference
Bootstrap Reference
SQL Reference
PHP Reference
HTML Colors
jQuery Reference
Python Reference

Top 10 Examples

HTML Examples
CSS Examples
JavaScript Examples
How To Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
jQuery Examples
Angular Examples
XML Examples

Web Certificates

HTML Certificate
CSS Certificate
JavaScript Certificate
jQuery Certificate
PHP Certificate
Bootstrap Certificate
XML Certificate

w3schools.com