

Variable

7

Variable

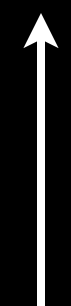
7

Array

|   |   |    |    |    |    |
|---|---|----|----|----|----|
| 4 | 8 | 15 | 16 | 23 | 42 |
|---|---|----|----|----|----|



0



1



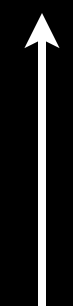
2



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## Variable

```
var number = 7
```

## Array

```
var numbers = [4, 8, 15, 16, 23, 42]
```

## Creating an empty array.

Create an empty array of a certain type.

```
var numbers = [Int]()
```

This example makes an empty array of Ints.

An alternative syntax, provides the same result.

```
var numbers: [Int] = []
```

## How many elements are in the array?

`numbers.count`

`count` is a read-only property that indicates how many elements are in the array.

```
var numbers = [4, 8, 15, 16, 23, 42]
print(numbers.count)
// 6 will be output to the console
```

`numbers.isEmpty`

`isEmpty` returns true when `count == 0`

# Add an element

```
numbers.append(75)
```

append is used to add a new element to the end of the array.

# subscript syntax

```
numbers[0]
```

Use an index value to access any element in the array. The first element is at index 0.

```
numbers[0] = 77
```

Use subscript syntax to change an existing value at a given index.

# Insert an element

```
numbers.insert(86, at: 0)
```

Insert an item into the array at a specified index.



# Remove an element

```
numbers.remove(at: 0)
```

Remove an item from the array at a specified index.

# Iterating over an array

```
for value in numbers {  
    print(value)  
}
```

Iterate over the entire set of values in an array.