

# Java Arrays

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# Java Arrays

Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value.

To declare an array, define the variable type with **square brackets**:

```
String[] cars;
```

We have now declared a variable that holds an array of strings. To insert values to it, we can use an array literal - place the values in a comma-separated list, inside curly braces:

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
```

To create an array of integers, you could write:

```
int[] myNum = {10, 20, 30, 40};
```

# Access the Elements of an Array

You access an array element by referring to the index number.

This statement accesses the value of the first element in cars:

## Example

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
System.out.println(cars[0]);
// Outputs Volvo
```

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Note: Array indexes start with 0: [0] is the first element. [1] is the second element, etc.

# Change an Array Element

To change the value of a specific element, refer to the index number:

## Example

```
cars[0] = "Opel";
```

## Example

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
cars[0] = "Opel";
System.out.println(cars[0]);
// Now outputs Opel instead of Volvo
```

Try it Yourself »

# Array Length

To find out how many elements an array has, use the length property:

## Example

```
String[] cars = {"Volvo", "BMW", "Ford", "Mazda"};
System.out.println(cars.length);
// Outputs 4
```

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## Test Yourself With Exercises

## **Exercise:**

Create an array of type String called cars.

= {"Volvo", "BMW", "Ford"};

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