

Java HashSet

[< Previous](#)[Next >](#)

Java HashSet

A HashSet is a collection of items where every item is unique, and it is found in the `java.util` package:

Example

Create a `HashSet` object called **`cars`** that will store strings:

```
import java.util.HashSet; // Import the HashSet class

HashSet<String> cars = new HashSet<String>();
```

Add Items

The `HashSet` class has many useful methods. For example, to add items to it, use the `add()` method:

```
// Import the HashSet class
import java.util.HashSet;

public class Main {
    public static void main(String[] args) {
        HashSet<String> cars = new HashSet<String>();
        cars.add("Volvo");
        cars.add("BMW");
        cars.add("Ford");
        cars.add("BMW");
        cars.add("Mazda");
        System.out.println(cars);
    }
}
```

Try it Yourself »

Note: In the example above, even though BMW is added twice it only appears once in the set because every item in a set has to be unique.

Check If an Item Exists

To check whether an item exists in a HashSet, use the `contains()` method:

Example

```
cars.contains("Mazda");
```

Try it Yourself »

To remove an item, use the `remove()` method:

Example

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

[Try it Yourself »](#)


To remove all items, use the `clear()` method:

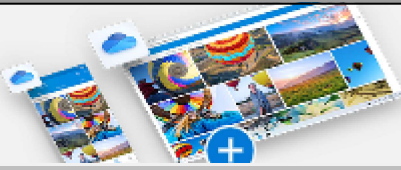
Example

```
cars.clear();
```

[Try it Yourself »](#)

ADVERTISEMENT

 Microsoft 365



Faites l'expérience des avantages de Microsoft 365

Faites-en plus avec les fonctionnalités Premium et le stockage OneDrive dans le nuage

HashSet Size

To find out how many items there are, use the `size` method:

Example



Try it Yourself »

Loop Through a HashSet

Loop through the items of an `HashSet` with a **for-each** loop:

Example

```
for (String i : cars) {  
    System.out.println(i);  
}
```

Try it Yourself »

Other Types

Items in an `HashSet` are actually objects. In the examples above, we created items (objects) of type "String". Remember that a String in Java is an object (not a primitive type). To use other types, such as int, you must specify an equivalent wrapper class: `Integer`. For other primitive types, use: `Boolean` for boolean, `Character` for char, `Double` for double, etc:

Example

Use a `HashSet` that stores `Integer` objects:

```
import java.util.HashSet;  
  
public class Main {
```

```
// Create a HashSet object called numbers
HashSet<Integer> numbers = new HashSet<Integer>();

// Add values to the set
numbers.add(4);
numbers.add(7);
numbers.add(8);

// Show which numbers between 1 and 10 are in the set
for(int i = 1; i <= 10; i++) {
    if(numbers.contains(i)) {
        System.out.println(i + " was found in the set.");
    } else {
        System.out.println(i + " was not found in the set.");
    }
}
}
```

Try it Yourself »

[< Previous](#)[Next >](#)

ADVERTISEMENT

[HTML](#)[CSS](#)[MORE ▼](#)[EXERCISES ▼](#)

COLOR PICKER



LIKE US



Get certified
by completing
a course today!



Get started

CODE GAME



Play Game

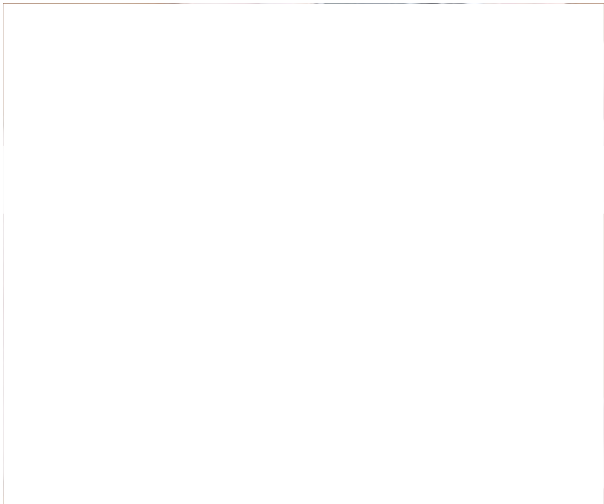
Certificates

HTML
CSS
JavaScript
Front End
Python
SQL
And more

ADVERTISEMENT



ADVERTISEMENT



[HTML](#)[CSS](#)[MORE ▼](#)[EXERCISES ▼](#)[FORUM](#)[ABOUT](#)[SHOP](#)

Top Tutorials

[HTML Tutorial](#)[CSS Tutorial](#)[JavaScript Tutorial](#)[How To Tutorial](#)[SQL Tutorial](#)[Python Tutorial](#)[W3.CSS Tutorial](#)[Bootstrap Tutorial](#)[PHP Tutorial](#)[Java Tutorial](#)[C++ Tutorial](#)[jQuery Tutorial](#)

Top References

[HTML Reference](#)[CSS Reference](#)[JavaScript Reference](#)[SQL Reference](#)[Python Reference](#)[W3.CSS Reference](#)[Bootstrap Reference](#)[PHP Reference](#)[HTML Colors](#)[Java Reference](#)[Angular Reference](#)[jQuery Reference](#)

Top Examples

[HTML Examples](#)[CSS Examples](#)[JavaScript Examples](#)[How To Examples](#)[SQL Examples](#)[Python Examples](#)[W3.CSS Examples](#)[Bootstrap Examples](#)[PHP Examples](#)[Java Examples](#)

[HTML](#)[CSS](#)[MORE ▾](#)[EXERCISES ▾](#)

Web Courses

[HTML Course](#)[CSS Course](#)[JavaScript Course](#)[Front End Course](#)[SQL Course](#)[Python Course](#)[PHP Course](#)[jQuery Course](#)[Java Course](#)[C++ Course](#)[C# Course](#)[XML Course](#)[Get Certified »](#)

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2021 by Refsnes Data. All Rights Reserved.
W3Schools is Powered by W3.CSS.

