Java ArrayList.lastIndexOf() – Syntax & Examples

Java ArrayList.lastIndexOf() – Examples

In this tutorial, we will learn about the Java ArrayList.lastIndexOf() method, and learn how to use this method to the index of last occurrence of specified object in this ArrayList, with the help of examples.

lastIndexOf(Object obj)

ArrayList.lastIndexOf() returns the index of the last occurrence of the specified object/element in this list, or -1 if this ArrayList does not contain the element.

Syntax

The syntax of lastIndexOf() method is

```
ArrayList.lastIndexOf(Object obj)
```

where

Parameter	Description
obj	The object/element to search for in the ArrayList.

Returns

The method returns integer.

Example 1 – lastIndexOf(Object obj)

In this example, we will define an ArrayList of Strings and initialize it with some elements in it. We will use ArrayList.lastIndexOf() method to find the index of last occurrence of object `"c"` in this ArrayList.

Java Program

```
import java.util.ArrayList;

public class Example {
    public static void main(String[] args) {
        ArrayList<String> arrayList = new ArrayList<String>();
        arrayList.add("a");
        arrayList.add("b");
        arrayList.add("c");
        arrayList.add("d");
        arrayList.add("c");

        Object obj = "c";
        int index = arrayList.lastIndexOf(obj);
        System.out.println("The last index is : " + index);
    }
}
```

Output

```
The last index is : 4
```

The object `"c"` is present twice, but lastIndexOf() returns the index of last occurrence of `"c"`. Hence the result `4`.

Example 2 – lastIndexOf(Object obj) – Object Not Present in ArrayList

In this example, we will define an ArrayList of Strings and initialize it with some elements in it. We will use ArrayList.lastIndexOf() method to find the last index of object `"m"` in this ArrayList. Since this object is not present in the ArrayList, lastIndexOf() should return -1.

Java Program

```
import java.util.ArrayList;

public class Example {
    public static void main(String[] args) {
        ArrayList<String> arrayList = new ArrayList<String>();
        arrayList.add("a");
        arrayList.add("b");
        arrayList.add("c");
        arrayList.add("d");
        arrayList.add("c");

        Object obj = "m";
        int index = arrayList.lastIndexOf(obj);
        System.out.println("The last index is : " + index);
    }
}
```

Output

```
The last index is : -1
```

Example 3 – lastIndexOf(Object obj) – ArrayList with User-defined Objects

In this example, we will define an ArrayList that can store objects of type `Car`. We will use ArrayList.lastIndexOf() method to find the index of last occurrence of `car3` in this ArrayList.

Java Program

```
import java.util.ArrayList;

public class Example {
    public static void main(String[] args) {
        Car car1 = new Car(1, "Tesla");
        Car car2 = new Car(2, "BMW");
        Car car3 = new Car(3, "Toyota");

        ArrayList<Car> arrayList = new ArrayList<Car>();
        arrayList.add(car1);
        arrayList.add(car3);
        arrayList.add(car3);
        arrayList.add(car2);
        arrayList.add(car3);

        Object obj = car3;
        int index = arrayList.lastIndexOf(obj);
        System.out.println("The last index is : " + index);
    }
}

class Car {
    int id;
    String name;
    public Car(int id, String name) {
        this.id = id;
        this.name = name;
    }
}
```

Output

```
The last index is : 4
```

Conclusion

In this Java Tutorial, we have learnt the syntax of Java ArrayList.lastIndexOf() method, and also learnt how to use this method with the help of examples.

Java ArrayList

- Java ArrayList
- Java ArrayList - add()
- Java ArrayList - addAll()
- Java ArrayList - clear()
- Java ArrayList - clone()
- Java ArrayList - contains()
- Java ArrayList - ensureCapacity()
- Java ArrayList - forEach()
- Java ArrayList - get()
- Java ArrayList - indexOf()
- Java ArrayList - isEmpty()
- Java ArrayList - iterator()
- **Java ArrayList - lastIndexOf()**
- Java ArrayList - listIterator()
- Java ArrayList - remove()
- Java ArrayList - removeAll()
- Java ArrayList - removeIf()
- Java ArrayList - removeRange()
- Java ArrayList - retainAll()
- Java ArrayList - set()
- Java ArrayList - size()
- Java ArrayList - spliterator()
- Java ArrayList - subList()
- Java ArrayList - toArray()
- Java ArrayList - trimToSize()

Java Tutorial

- Java Tutorial
- Java Introduction
- Java Installation
- IDEs for Java Development

- Java Datatypes
- Java Operators
- Java Decision Making
- Java Loops
- Java Exception Handling
- Java File Operations
- Java OOPs
- Java Array
- Java String
- Java Date & Time
- Java MySQL
- Java Random
- Java Math
- Java ArrayList