How to convert an array to ArrayList in java

BY CHAITANYA SINGH | FILED UNDER: JAVA COLLECTIONS

In the last tutorial we have shared two methods of <u>converting an ArrayList to Array with example</u>. Here we are sharing three different ways to convert an Array to ArrayList. Basically we are converting an String Array to ArrayList of String type.

String array[] to ArrayList<String>

Method 1: Conversion using Arrays.asList()

Syntax:

ArrayList<T> arraylist= new ArrayList<T>(Arrays.asList(arrayname));

Example:

In this example we are using <u>Arrays.asList</u> method to convert the _{Array} to _{ArrayList}.

```
import java.util.*;
public class ArrayToArrayList {
     public static void main(String[] args) {
          /* Array Declaration and initialization*/
          String citynames[]={"Agra", "Mysore", "Chandigarh", "Bhopal"};
          /*Array to ArrayList conversion*/
          ArrayList<String> citylist= new
ArrayList<String>(Arrays.asList(citynames));
          /*Adding new elements to the converted List*/
          citylist.add("New City2");
          citylist.add("New City3");
          /*Final ArrayList content display using for*/
          for (String str: citylist)
          {
                System.out.println(str);
          }
      }
```

Output:

```
Agra
Mysore
Chandigarh
Bhopal
New City2
New City3
```

Method 2: Collections.addAll method

<u>Collections.addAll</u> method all the array elements to the specified collection. This is how Collections.addAll method is being called. It does the same as <u>Arrays.asList</u> method however it is much faster than it so performance wise this is a best way to get the array converted to <u>ArrayList</u>.

```
String array[]={new Item(1), new Item(2), new Item(3), new Item(4)};
ArrayList<T> arraylist = new ArrayList<T>();
Collections.addAll(arraylist, array);
```

OR

Collections.addAll(arraylist, new Item(1), new Item(2), new Item(3), new Item(4));

Example

```
import java.util.*;
public class Example2 {
        public static void main(String[] args) {
            /* Array Declaration and initialization*/
            String array[]={"Hi", "Hello", "Howdy", "Bye"};
            /*ArrayList declaration*/
            ArrayList<String> arraylist= new ArrayList<String>();
            /*Conversion*/
            Collections.addAll(arraylist, array);
            /*Adding new elements to the converted List*/
            arraylist.add("String1");
            arraylist.add("String2");
            /*Display array list*/
            for (String str: arraylist)
                 System.out.println(str);
        }
```

Output

```
Hi
Hello
Howdy
Bye
```

Method 3: Manual way of doing things

We can also add all the array's element to the array list manually. Below example shows the logic of manual conversion.

```
package beginnersbook.com;
import java.util.*;
public class Details {
        public static void main(String[] args) {
            /*ArrayList declaration*/
            ArrayList<String> arraylist= new ArrayList<String>();
            /*Initialized Array*/
            String array[] = {"Text1","Text2","Text3","Text4"};
            /*array.length returns the current number of
             * elements present in array*/
            for(int i =0;i<array.length;i++)</pre>
                 /* We are adding each array's element to the ArrayList*/
                  arraylist.add(array[i]);
            /*ArrayList content*/
            for(String str: arraylist)
                 System.out.println(str);
      }
```

Output:

```
Text1
Text2
Text3
Text4
```