How to loop ArrayList in Java

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Earlier we shared <u>ArrayList example</u> and <u>how to initialize ArrayList in Java</u>. In this post we are sharing how to **iterate (loop) ArrayList in Java**.

There are four ways to loop ArrayList:

- 1. For Loop
- 2. Advanced for loop
- 3. While Loop
- 4. Iterator

Lets have a look at the below example – I have used all of the mentioned methods for iterating list.

```
import java.util.*;
public class LoopExample {
   public static void main(String[] args) {
      ArrayList<Integer> arrlist = new ArrayList<Integer>();
      arrlist.add(14);
      arrlist.add(7);
      arrlist.add(39);
      arrlist.add(40);
      /* For Loop for iterating ArrayList */
      System.out.println("For Loop");
      for (int counter = 0; counter < arrlist.size(); counter++) {</pre>
          System.out.println(arrlist.get(counter));
      }
      /* Advanced For Loop*/
      System.out.println("Advanced For Loop");
      for (Integer num : arrlist) {
           System.out.println(num);
      /* While Loop for iterating ArrayList*/
      System.out.println("While Loop");
      int count = 0;
      while (arrlist.size() > count) {
         System.out.println(arrlist.get(count));
         count++;
      }
      /*Looping Array List using Iterator*/
      System.out.println("Iterator");
      Iterator iter = arrlist.iterator();
      while (iter.hasNext()) {
         System.out.println(iter.next());
```

```
}
}
Output
```

Output:

```
For Loop
14
7
39
40
Advanced For Loop
14
7
39
40
While Loop
14
7
39
40
Iterator
14
39
40
```

In the comment section below, Govardhan asked a question: He asked, how to iterate an ArrayList using <u>Enumeration</u>. Govardhan here is the code:

How to iterate arraylist elements using Enumeration interface

```
import java.util.Enumeration;
import java.util.ArrayList;
import java.util.Collections;
public class EnumExample {
   public static void main(String[] args) {
      //create an ArrayList object
     ArrayList<String> arrayList = new ArrayList<String>();
      //Add elements to ArrayList
      arrayList.add("C");
      arrayList.add("C++");
      arrayList.add("Java");
      arrayList.add("DotNet");
      arrayList.add("Perl");
      // Get the Enumeration object
      Enumeration<String> e = Collections.enumeration(arrayList);
      // Enumerate through the ArrayList elements
      System.out.println("ArrayList elements: ");
      while(e.hasMoreElements())
      System.out.println(e.nextElement());
```

```
}
}
Output:

ArrayList elements:
C
C++
Java
DotNet
Perl
```