```java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.ListIterator;

public class IterateOverArrayList {

    public static void main(String[] args){
        List<String> tvShows = new ArrayList<>();
        tvShows.add("Breaking Bad");
        tvShows.add("Game Of Thrones");
        tvShows.add("Friends");
        tvShows.add("Prison break");
        System.out.println("\n=== Iterate using an iterator() ===");
        Iterator<String> tvShowIterator = tvShows.iterator();
        while (tvShowIterator.hasNext()){
            String tvShow = tvShowIterator.next();
            System.out.println(tvShow);
        }

        System.out.println("==Iterate using an iterator() and forEachRemaining() method ===");

        tvShowIterator = tvShows.iterator();
        tvShowIterator.forEachRemaining(tvShow -> {
            System.out.println(tvShow);
        });
        System.out.println("\n=== Iterate using simple for-each loop ===");

        for(String tvShow: tvShows){
            System.out.println(tvShow);
        }

        System.out.println("\n=== Iterate using for loop with index===");
        for(int i=0; i<tvShows.size(); i++){
            System.out.println(tvShows.get(i));
        }
```

```
37          System.out.println("\n=== Iterate iterator
    ===");
38          ListIterator iterator = tvShows.
   listIterator();
39          System.out.println("Elements in forward
   direction");
40          System.out.println("\n==== Iterate using
   while loop=====");
41
42          while(iterator.hasNext()){
43              System.out.println(iterator.next());
44          }
45
46          System.out.println("============Elements in
    backward direction=======");
47
48          while (iterator.hasPrevious()){
49              System.out.println(iterator.previous
   ());
50          }
51
52      }
53
54
55
56 }
57
```

```java
import java.util.ArrayList;
import java.util.List;

public class CreateArrayListExample {
    public static void main(String[] args){
        List<String> animals = new ArrayList<>();

        animals.add("Lion");
        animals.add("Tiger");
        animals.add("Cat");
        animals.add("Dog");

        System.out.println(animals);
        animals.add(2,"Elephant");
        System.out.println(animals);
    }
}

```

```java
import java.util.ArrayList;
import java.util.List;

public class RemoveElementsFromArrayList {
    public static void main(String[] args){
        List<String> programmingLanguages = new ArrayList<>();
        programmingLanguages.add("C");
        programmingLanguages.add("C++");
        programmingLanguages.add("Java");
        programmingLanguages.add("Kotlin");
        programmingLanguages.add("Python");
        programmingLanguages.add("Perl");
        programmingLanguages.add("Ruby");

        System.out.println("Initial List: " + programmingLanguages);

        programmingLanguages.remove(5);
        System.out.println("After remove(5): " + programmingLanguages);

        boolean isRemoved = programmingLanguages.remove("Kotlin");
        System.out.println("After remove(\"Kotlin\"): " + programmingLanguages);

        List<String> scriptingLanguages = new ArrayList<>();
        scriptingLanguages.add("Python");
        scriptingLanguages.add("Ruby");
        scriptingLanguages.add("Perl");

        programmingLanguages.removeAll(scriptingLanguages);

        System.out.println("After removeAll(scriptingLanguages): " + programmingLanguages);

        programmingLanguages.clear();

```

```
34          System.out.println("After clear(): " +
   programmingLanguages);
35      }
36  }
37
```

```java
import java.util.ArrayList;
import java.util.List;

public class SearchElementsInArrayListExample {
    public static void main(String[] args){
        List<String> names = new ArrayList<>();
        names.add("John");
        names.add("Alice");
        names.add("Bob");
        names.add("Steve");
        names.add("John");
        names.add("Steve");
        names.add("Maria");

        System.out.println("Does names array contain \"Bob\"? : " + names.contains("Bob"));

        System.out.println("indexOf \"Steve\": " + names.indexOf("Steve"));
        System.out.println("indexOf \"Mark\": " + names.indexOf("Mark"));

        System.out.println("lastIndexOf \"John\" : " + names.lastIndexOf("John"));
        System.out.println("lastIndexOf \"Bill\" : " + names.lastIndexOf("Bill"));
    }
}

```

```java
import java.util.ArrayList;
import java.util.List;

public class CreateArrayListFromCollectionExample {
    public static void main(String[] args){
        List<Integer> firstFivePrimeNumbers = new ArrayList<>();
        firstFivePrimeNumbers.add(2);
        firstFivePrimeNumbers.add(3);
        firstFivePrimeNumbers.add(5);
        firstFivePrimeNumbers.add(7);
        firstFivePrimeNumbers.add(11);
        List<Integer> firstTenPrimeNumbers = new ArrayList<>(firstFivePrimeNumbers);

        List<Integer> nextFivePrimeNumbers = new ArrayList<>();
        nextFivePrimeNumbers.add(13);
        nextFivePrimeNumbers.add(17);
        nextFivePrimeNumbers.add(19);
        nextFivePrimeNumbers.add(23);
        nextFivePrimeNumbers.add(29);

        firstTenPrimeNumbers.addAll(nextFivePrimeNumbers);
        System.out.println(firstTenPrimeNumbers);
    }
}

```

```java
import java.util.ArrayList;
import java.util.List;

public class CreateArrayListFromCollectionExample2 {
    public static void main(String[] args){
        List<String> topCompanies = new ArrayList<>();

        System.out.println("Is the topCompanies list empty? : " + topCompanies.isEmpty());
        topCompanies.add("Google");
        topCompanies.add("Apple");
        topCompanies.add("Microsoft");
        topCompanies.add("Amazon");
        topCompanies.add("Facebook");

        System.out.println("Here are the top " + topCompanies.size() + " companies in the world");
        System.out.println(topCompanies);
        String bestCompany = topCompanies.get(0);
        String secondBestCompany = topCompanies.get(1);
        String lastCompany = topCompanies.get(topCompanies.size() -1);

        System.out.println("Best Company: " + bestCompany);
        System.out.println("Second Best Company: " + secondBestCompany);
        System.out.println("Last Company in the list: " + lastCompany);

        topCompanies.set(4,"Walmart");
        System.out.println("Modified top companies list" + topCompanies);
    }
}

```