import java.util.ArrayList;

import java.util.Arrays;

import java.util.Scanner;

public class AddingItemsDynamically {

   public static void main(String args[]) {

      Scanner sc = new Scanner(System.in);

      System.out.println("Enter the size of the array :: ");

      int size = sc.nextInt();

      String myArray[] = new String[size];

      System.out.println("Enter elements of the array (Strings) :: ");

      for(int i=0; i<size; i++) {

         myArray[i] = sc.next();

      }

      System.out.println(Arrays.toString(myArray));

      ArrayList<String> myList = new ArrayList<String>(Arrays.asList(myArray));

      System.out.println("Enter the element that is to be added:");

      String element = sc.next();

      myList.add(element);

      myArray = myList.toArray(myArray);

      System.out.println(Arrays.toString(myArray));

   }

}

**Output**

Enter the size of the array ::

3

Enter elements of the array (Strings) ::

Ram

Rahim

Robert

[Ram, Rahim, Robert]

Enter the element that is to be added:

Mahavir

[Ram, Rahim, Robert, Mahavir]

## In Java

In Java, dynamic arrays are called ArrayLists.

In Java, "normal" arrays are fixed-size. You have to give them a size and can't expand them or contract them. To change the size, you have to make a new array and copy the data you want - which is inefficient and a pain for you.

Instead of

Integer[] ints = new Integer[x]

you use

List<Integer> ints = new ArrayList<Integer>();

Then to change the list you use ints.add(y) and ints.remove(z) amongst many other handy methods you can find in the appropriate Javadocs.

<https://www.geeksforgeeks.org/how-do-dynamic-arrays-work/>