# Program1

# package Arraylist.java;

# import java.util.ArrayList;

# public class Arraylist {

# public static void main(String[] args) {

# ArrayList &lt;Integer&gt; number=new ArrayList&lt;&gt;();

# number.add(10);

# number.add(20);

# number.add(30);

# System.out.println(&quot;given array:&quot;+number);

# System.out.println(&quot;size of array:&quot;+number.size());

# System.out.println(&quot;remove element:&quot;+number.remove(1));

# System.out.println(&quot;get element:&quot;+number.get(1));

# }

# }

# Output

# given array:[10, 20, 30]

# size of array:3

# remove element:20

# get element:30

# 

# program2

# import java.util.ArrayList;

# import java.util.Scanner;

# public class arraylist {

# public static void main(String[] args) {

# Scanner sc=new Scanner(System.in);

# ArrayList <Object> details=new ArrayList<>();

# details.add("nisha");

# details.add("nisha");

# System.out.println("given array:"+details);

# System.out.println("size of array:"+details.size());

# System.out.println("remove element:"+details.remove(1));

# System.out.println("get element:"+details.get(1));}

# }

# Output

# given array:[vijay, 2000, developer]

# size of array:3

# remove element:2000

# get element:developer

# package ArrayList.java;

# import java.util.ArrayList;

# import java.util.Arrays;

# import java.util.Scanner;

# public class Array {

# public static void main(String[] args) {

# Scanner sc = new Scanner(System.in);

# System.out.println("enter string: ");

# String input = sc.nextLine();

# sc.close();

# 

# String result = removeVowels(input);

# System.out.println("String without vowels: " + result);

# }

# public static String removeVowels(String str) {

# ArrayList<Character> vowels = new ArrayList<>(Arrays.asList('a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U'));

# StringBuilder result = new StringBuilder();

# 

# for (char ch : str.toCharArray()) {

# if (!vowels.contains(ch)) {

# result.append(ch);

# }

# }

# 

# return result.toString();

# }

# }

# Output

# enter string:

# sri

# String without vowels: sr

#### Notes

## collections in java

## Array list

## it is resizeable array in java that is part of the java collections in framework.

## array list can grow or shrink dynamically as elements are added or removed.

## simple array list program:

#### ARRAY LIST

#### arraylist ia resizable array in java that is part of the java collectio framework

#### regular array,arraylist can grow or shink dynamically as elements are added or removed.

#### METHODS

#### add(element):add anm element to a list

#### get(index):retrives an element at the specified index

#### remove(index):removes the element at the specified index

#### size():returns the size of the list