Status	Finished
Started	Wednesday, 20 November 2024, 7:07 PM
Completed	Wednesday, 20 November 2024, 7:57 PM
Duration	50 mins 45 secs

Question **1**

Correct

Marked out of 1.00

Given an ArrayList, the task is to get the first and last element of the ArrayList in Java.

```
Input: ArrayList = [1, 2, 3, 4]
Output: First = 1, Last = 4

Input: ArrayList = [12, 23, 34, 45, 57, 67, 89]
Output: First = 12, Last = 89
```

Approach:

1. Get the ArrayList with elements.
2. Get the first element of ArrayList using the get(index) method by passing index = 0.
3. Get the last element of ArrayList using the get(index) method by passing index = size – 1.

Answer: (penalty regime: 0 %)

```java
import java.util.ArrayList;
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Creating the ArrayList
        ArrayList<Integer> arrayList = new ArrayList<>();

        int n = scanner.nextInt(); // Read the size of the ArrayList


        for (int i = 0; i < n; i++) {
            arrayList.add(scanner.nextInt()); // Add each element to the ArrayList
        }

        // Display the ArrayList
        System.out.println("ArrayList: " + arrayList);

        // Get the first and last elements
        if (!arrayList.isEmpty()) {
            int first = arrayList.get(0); // First element
            int last = arrayList.get(arrayList.size() - 1); // Last element

            System.out.println("First : " + first + ", Last : " + last);
        } else {
            System.out.println("The ArrayList is empty.");
        }

        scanner.close();
    }
}
```

	Test	Input	Expected	Got	
✓	1	6 30 20 40 50 10 80	ArrayList: [30, 20, 40, 50, 10, 80] First : 30, Last : 80	ArrayList: [30, 20, 40, 50, 10, 80] First : 30, Last : 80	✓
✓	2	4 5 15 25 35	ArrayList: [5, 15, 25, 35] First : 5, Last : 35	ArrayList: [5, 15, 25, 35] First : 5, Last : 35	✓

Passed all tests! ✓

Question **2**

Correct

Marked out of 1.00

The given Java program is based on the ArrayList methods and its usage. The Java program is partially filled. Your task is to fill in the incomplete statements to get the desired output.

list.set();

list.indexOf());

list.lastIndexOf())

list.contains()

list.size());

list.add();

list.remove();

The above methods are used for the below Java program.

Answer: (penalty regime: 0 %)

Reset answer

```
import java.util.ArrayList; import java.util.Scanner; public class Prog {
public static void main(String[] args) {
Scanner sc= new Scanner(System.in); int n = sc.nextInt();
ArrayList<Integer> list = new ArrayList<Integer>();
for(int i = 0; i<n;i++) list.add(sc.nextInt());
// printing initial value ArrayList
System.out.println("ArrayList: " + list);
//Replacing the element at index 1 with 100
list.set(1,100);
//Getting the index of first occurrence of 100
System.out.println("Index of 100 = "+ list.indexOf(100) );
//Getting the index of last occurrence of 100
System.out.println("LastIndex of 100 = "+ list.lastIndexOf(100));
// Check whether 200 is in the list or not
System.out.println(list.contains(200)); //Output : false
// Print ArrayList size
System.out.println("Size Of ArrayList = "+list.size() );
//Inserting 500 at index 1
list.add(1,500);    // code here
//Removing an element from position 3
list.remove(3); // code here
System.out.print("ArrayList: " + list); }
}

```

	Test	Input	Expected	Got	
✓	1	5 1 2 3 100 5	ArrayList: [1, 2, 3, 100, 5] Index of 100 = 1 LastIndex of 100 = 3 false Size Of ArrayList = 5 ArrayList: [1, 500, 100, 100, 5]	ArrayList: [1, 2, 3, 100, 5] Index of 100 = 1 LastIndex of 100 = 3 false Size Of ArrayList = 5 ArrayList: [1, 500, 100, 100, 5]	✓

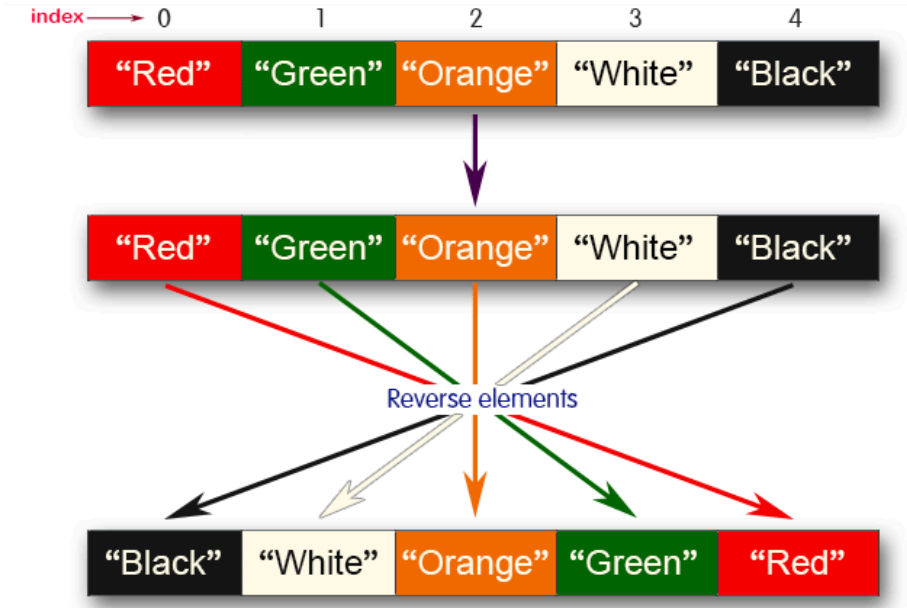
Passed all tests! ✓

Question **3**

Correct

Marked out of 1.00

Write a Java program to reverse elements in an array list.




```
Sample input and Output:
Red
Green
Orange
White
Black
Sample output
List before reversing :
[Red, Green, Orange, White, Black]
List after reversing :
[Black, White, Orange, Green, Red]
```

Answer: (penalty regime: 0 %)

```
import java.util.ArrayList; import java.util.Collections; import java.util.Scanner;
public class ReverseArrayList { public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
ArrayList<String> list = new ArrayList<>(); int n = scanner.nextInt();
for (int i = 0; i < n; i++) {
String element = scanner.next();
list.add(element);
}
System.out.println("List before reversing : "); System.out.println(list);
Collections.reverse(list);
System.out.println("List after reversing : ");
System.out.println(list);
}
}

```

	Test	Input	Expected	Got	
✓	1	5 Red Green Orange White Black	List before reversing : [Red, Green, Orange, White, Black] List after reversing : [Black, White, Orange, Green, Red]	List before reversing : [Red, Green, Orange, White, Black] List after reversing : [Black, White, Orange, Green, Red]	✓
✓	2	4 CSE AIML AIDS CYBER	List before reversing : [CSE, AIML, AIDS, CYBER] List after reversing : [CYBER, AIDS, AIML, CSE]	List before reversing : [CSE, AIML, AIDS, CYBER] List after reversing : [CYBER, AIDS, AIML, CSE]	✓

Passed all tests! ✓

◄ Lab-10-MCQ

Jump to...

Lab-11-MCQ ►