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| | |
|------------------|-----------------------------------|
| Status | Finished |
| Started | Friday, 22 November 2024, 9:01 PM |
| Completed | Friday, 22 November 2024, 9:29 PM |
| Duration | 28 mins 4 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 %)

```

1 import java.util.Scanner;
2 import java.util.Collections;
3 import java.util.ArrayList;
4 public class main{
5     public static void main(String args[])
6     {
7         ArrayList<Integer>l=new ArrayList<>();
8         Scanner s=new Scanner(System.in);
9         int n=s.nextInt();
10        for(int i=0;i<n;i++)
11        {
12            l.add(s.nextInt());
13        }
14        System.out.println("ArrayList: "+l+"\nFirst : "+l.get(0)+" , Last : "+l.get(l.size()-1))
15    }
16 }
17 }

```

| | 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

```
1 //import java.util.ArrayList;  
2 import java.util.ArrayList;  
3 import java.util.Scanner;  
4  
5 public class Prog {  
6  
7     public static void main(String[] args)  
8     {  
9         Scanner sc= new Scanner(System.in);  
10        int n = sc.nextInt();  
11  
12        ArrayList<Integer> list = new ArrayList<Integer>();  
13  
14        for(int i = 0; i<n;i++)  
15            list.add(sc.nextInt());  
16  
17        // printing initial value ArrayList  
18        System.out.println("ArrayList: " + list);  
19  
20        //Replacing the element at index 1 with 100  
21  
22        list.set(1,100);  
23        //Getting the index of first occurrence of 100  
24        System.out.println("Index of 100 = "+list.indexOf(100));  
25  
26        //Getting the index of last occurrence of 100  
27        System.out.println("LastIndex of 100 = "+ list.lastIndexOf(100));  
28        // Check whether 200 is in the list or not  
29        System.out.println(list.contains(200)); //Output : false  
30        // Print ArrayList size  
31        System.out.println("Size Of ArrayList = "+list.size());  
32        //Inserting 500 at index 1  
33        list.add(1,500); // code here  
34        //Removing an element from position 3  
35        list.remove(2);  
36        list.set(2,100); // code here  
37        System.out.print("ArrayList: " + list);  
38    }  
39 }
```

| | 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] | ✓ |

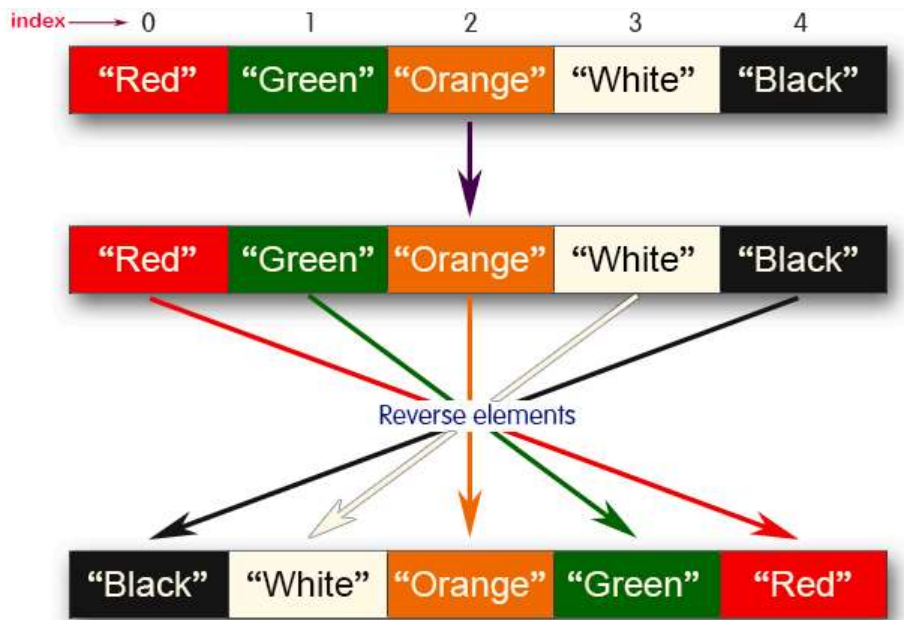
Passed all tests! ✓

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 %)

```

1 import java.util.Scanner;
2 import java.util.ArrayList;
3 public class main{
4     public static void main(String args[])
5     {
6         Scanner s=new Scanner(System.in);
7         int n=s.nextInt();
8         ArrayList<String>l=new ArrayList<>();
9         for(int i=0;i<n;i++)
10             l.add(s.next());
11         ArrayList<String>l2=new ArrayList<>();
12         System.out.println("List before reversing :\n"+l);
13         for(int i=l.size()-1;i>=0;i--)
14         {
15             l2.add(l.get(i));
16         }
17         System.out.println("List after reversing :\n"+l2);
18     }
19 }

```

| | 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! ✓

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