

LP_Practice_SimpleEncodedArray

Ramya.V | 12 Feb 2023



Finish State: Normal

Test Taken on: February 12, 2023 01:21:00 PM IST



Ramya.V
ramya.v.2020.cse@ritchennai.edu.in

Overall Summary

40 Marks Scored
out of 40

100 % 100 percentile
out of 42512 Test Takers

2m 5s Time taken
of 1hr 20mins

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).



This shows the correctness of questions attempted
by the test taker

Correct	1 Ques	40/40 Marks
Incorrect	0 Ques	0/0 Marks
Partially Correct	0 Ques	0/0 Marks
Not Attempted	0 Ques	0/0 Marks

Section-Wise Details

▼ Section 1 Program	question(s) 1 Q.	Time taken 2m 5s (Untimed)	Marks Scored 40 / 40
---------------------------	---------------------	-------------------------------	-------------------------

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).




■ Correct	1 Ques	40/40 Marks
-----------	--------	-------------

This shows the correctness of questions attempted by the test taker


Test Log

12th Feb 2023


- 01:18 PM




Started the test with Program
- 01:19 PM




Away from test window
- 01:20 PM



Away from test window
- 01:20 PM



Away from test window
- 01:20 PM



Finished the test

About the Report

This Report is generated electronically on the basis of the inputs received from the assessment takers. This Report including the AI flags that are generated in case of availing of proctoring services, should not be solely used/relied on for making any business, selection, entrance, or employment-related decisions. Mettl accepts no liability from the use of or any action taken or refrained from or for any and all business decisions taken as a result of or reliance upon anything, including, without limitation, information, advice, or AI flags contained in this Report or sources of information used or referred to in this Report.



1. Program

Question 1

🔖 Revisit Later

How to Attempt?

Simple Encoded Array_1: Maya has stored few confidential numbers in an array (array of int). To ensure that others do not find the numbers easily, she has applied a simple encoding.

Encoding used: Each array element has been substituted with a value that is the sum of its original value and its succeeding element's value.

i.e. $arr[i] = \text{original value of } arr[i] + \text{original value of } arr[i+1]$

e.g. value in $arr[0] = \text{original value of } arr[0] + \text{original value of } arr[1]$

Also note that value of last element i.e. $arr[\text{last index}]$ remains unchanged.

For example,

If the encoded array is {7,6,8,16,12,3}

The original array should have been {2,5,1,7,9,3}

Provided the encoded array, you are expected to find the –

- First number (value in index 0) in the original array
- Sum of all numbers in the original array

Write the logic in the function **findOriginalFirstAndSum(int[] input1, int input2);**

where,

input1 represents the encoded array, and

input2 represents the number of elements in the array input1

The method is expected to –

- find the value of the first number of the original array and store it in the member **output1** and

< 1 >

Attempted: 1/1

JAVA7

Compiler: Java - 1.7

```
1 import java.io.*;
2 import java.util.*;
3
4 // Read only region start
5 class UserMainCode
6 {
7
8     public class Result{
9         public final int output1;
10        public final int output2;
11
12        public Result(int out1, int out2){
13            output1 = out1;
14            output2 = out2;
15        }
16    }
17
18    public Result findOriginalFirstAndSum(int[] input1,int input2){
19        // Read only region end
20        int[] arr=new int[input2];
21        arr[input2-1]=input1[input2-1];
22        int sum=arr[input2-1];
23        for(int i=input2-2;i>=0;i--){
24            {
25                arr[i]=input1[i]-arr[i+1];
26                sum+=arr[i];
27            }
```

☐ Use Custom Input

①

Compile and Test

Submit Code

1. Program

Question 1

Revisit Later

How to Attempt?

Simple Encoded Array_1: Maya has stored few confidential numbers in an array (array of int). To ensure that others do not find the numbers easily, she has applied a simple encoding.

Encoding used: Each array element has been substituted with a value that is the sum of its original value and its succeeding element's value.

i.e. $arr[i] = \text{original value of } arr[i] + \text{original value of } arr[i+1]$

e.g. value in $arr[0] = \text{original value of } arr[0] + \text{original value of } arr[1]$

Also note that value of last element i.e. $arr[\text{last index}]$ remains unchanged.

For example,

If the encoded array is {7,6,8,16,12,3}

The original array should have been {2,5,1,7,9,3}

Provided the encoded array, you are expected to find the –

- First number (value in index 0) in the original array
- Sum of all numbers in the original array

Write the logic in the function **findOriginalFirstAndSum(int[] input1, int input2);** where,

input1 represents the encoded array, and

input2 represents the number of elements in the array input1

The method is expected to –

- find the value of the first number of the original array and store it in the member **output1** and

< 1 >

Attempted: 1/1

JAVA7

Compiler: Java - 1.7

```
7
8
9     public class Result{
10         public final int output1;
11         public final int output2;
12
13         public Result(int out1, int out2){
14             output1 = out1;
15             output2 = out2;
16         }
17
18         public Result findOriginalFirstAndSum(int[] input1,int input2){
19             // Read only region end
20             int[] arr=new int[input2];
21             arr[input2-1]=input2 - UserMainCode.findOriginalFirstAndSum(input1, input2);
22             int sum=arr[input2-1];
23             for(int i=input2-2;i>=0;i--){
24                 arr[i]=input1[i]-arr[i+1];
25                 sum+=arr[i];
26             }
27             Result r1= new Result(arr[0],sum);
28             return r1;
29         }
30     }
31
32
```

☐ Use Custom Input

①

Compile and Test

Submit Code

1. Program

1

Attempted: 1/1

Question 1

Revisit Later

How to Attempt?

Simple Encoded Array_1: Maya has stored few confidential numbers in an array (array of int). To ensure that others do not find the numbers easily, she has applied a simple encoding.

Encoding used: Each array element has been substituted with a value that is the sum of its original value and its succeeding element's value.

i.e. $arr[i] = \text{original value of } arr[i] + \text{original value of } arr[i+1]$

e.g. value in $arr[0] = \text{original value of } arr[0] + \text{original value of } arr[1]$

Also note that value of last element i.e. $arr[\text{last index}]$ remains unchanged.

For example,

If the encoded array is {7,6,8,16,12,3}

The original array should have been {2,5,1,7,9,3}

Provided the encoded array, you are expected to find the –

a. First number (value in index 0) in the original array

b. Sum of all numbers in the original array

Write the logic in the function `findOriginalFirstAndSum(int[] input1, int input2);`

where,

input1 represents the encoded array, and

input2 represents the number of elements in the array input1

The method is expected to –

- find the value of the first number of the original array and store it in the member **output1** and

✓ default

CODE EXECUTION DETAILS

Time: 256 ms

Memory: 103812 kb

TEST CASE INFORMATION

Input

{-2,-7,-12,-15},4

Expected Output

8,-14

Actual Output

8,-14

CONSOLE OUTPUT

STANDARD ERROR/WARNING

None

✓ default