CHANDIGARH UNIVERSITY

UNIVERSITY INSTITUTE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Submitted By:	Submitted To:
Subject Name	Competitive Coding
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LAB INDEX

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SECTION:902/B

Sr. No	Program	Date	Evaluation				Sign
			LW (12)	VV (8)	FW (10)	Total (30)	

Practical 1

Problem Satement 1.1

Objective

Today, we will learn about the Array data structure. Check out the Tutorial tab for learning materials and an instructional video.

Task

Given an array, A, of N integers, print A's elements in reverse order as a single line of space-separated numbers.

Example

A=[1,2,3,4]

Print 4 3 2 1. Each integer is separated by one space.

Input Format

The first line contains an integer,N (the size of our array).
The second line contains N space-separated integers that describe A array

elements.

Constraints

1<=N<=1000
1<=A[i]<=1000. Where A[i] is the ith integer in the array.
, where is the integer in the array.

Output Format

Print the elements of array A in reverse order as a single line of space-separated numbers.

Solution:

```cpp
#include <iostream>
#include <algorithm>
#include <limits>
#include <vector>
using namespace std;


/*Name=Rajdeep Jaiswal
Uid=20BCS2761*/
int main(){
    int n;
    cin >> n;
    vector<int> arr(n);
    for(int arr_i = 0;arr_i < n;arr_i++){
        cin >> arr[arr_i];
    }
```

```
    for(int arr_i = n-1;arr_i >= 0;arr_i--){
        cout << arr[arr_i] << " ";
    }
    cout << endl;
  return 0;
}
```

Congratulations

You solved this challenge. Would you like to challenge your friends? [f] [y] [in]

Next Challenge

✓ Test case 2 🔒

✓ Test case 3 🔒

✓ Test case 4 🔒

✓ Test case 5 🔒

✓ Test case 6 🔒

✓ Test case 7 🔒

✓ **Test case 8**

Compiler Message

Success

Input (stdin)   Download

```
1   4
2   1 4 3 2
```

Expected Output   Download

```
1   2 3 4 1
```

Problem Statement 1.2

Task:

Given an array of integers, find the sum of its elements.

For example, if the array , =[1,2,3,4],1+2+3=6, so return .

Function Description

Complete the *simpleArraySum* function in the editor below. It must return
the sum of the array elements as an integer.

simpleArraySum has the following parameter(s):

- *ar*: an array of integers

Input Format

The first line contains an integer, n , denoting the size of the array.

The second line contains n space-separated integers representing the
array's elements.

Constraints

0<n,arr[i]<=100

Solution:
```
#include <cmath>
#include <vector>
#include <iostream>
#include <algorithm>
using namespace std;
```

```
/*Name=Rajdeep Jaiswal
Uid=20BCS2761*/
int main() {

    int n;
    int num, total = 0;

    cin >> n;

    for (int i=0; i<n; i++) {
        cin >>num;
        total += num;
    }

    cout << total;

    return 0;
}
```

⊘ **Test case 0**

⊘ Test case 1 🔒

⊘ Test case 2 🔒

Compiler Message

Success

Input (stdin)   Download

1   6
2   1 2 3 4 10 11

Expected Output   Download

1   31