# CHANDIGARH UNIVERSITY UNIVERSITY INSTITUTE OF ENGINEERING DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



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Subject Name	Competitive Coding	
Subject Code	20CSP-314	
Branch	CSE	
Semester	5th	

# **LAB INDEX**

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**SECTION:**20BCS\_WM\_617\_B

**SUBJECT NAME:** Competitive Coding Lab

SUBJECT CODE: 20CSP-314

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

# Experiment - 1

Student Name: SANSKAR AGRAWAL UID: 20BCS5914

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Semester: 5<sup>th</sup> Sem Date of Performance: 09 Aug,2022

Subject Name: Competitive Coding

Subject Code: 20CSP-314

## **Problem Statement 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 array A's elements.

#### Constraints

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- $1 \le N \le 1000$
- ullet  $1 \leq A[i] \leq 10000$ , where A[i] is the  $i^{th}$  integer in the array.

#### **Output Format**

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

#### Sample Input

4 1 4 3 2

#### Sample Output

2 3 4 1

### **Solution:**

```
#include <bits/stdc++.h>
using namespace
std;
void reverse(int *arr,int n,int i,int j){
         //base
case :
if(i>j){
return;
    }
         // processing
int temp = arr[i];
arr[i]=arr[j];
arr[j]=temp;
i++;
         j--;
    reverse(arr,n,i,j);
} int main() {
arr[10000];
                 int n;
                   for(int
cin>>n;
i=0;i<n;i++){
cin>>arr[i];
     }
int start = 0;
int end = n - 1;
      reverse(arr,n,start,end);
            for(int
i=0;i<n;i++){
cout<<arr[i]<<" ";</pre>
     }
cout<<endl;</pre>
     }
```

# **Output:**

