



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

## EXPERIMENT- 4

**Student Name:** Shivani Singh

**UID:** 22BCS16676

**Branch:** CSE

**Section/Group:** 22BCS\_IOT-638-A

**Semester:** 6

**Date of Performance:** 18.02.25

**Subject Name:** Advance Programming Lab-II

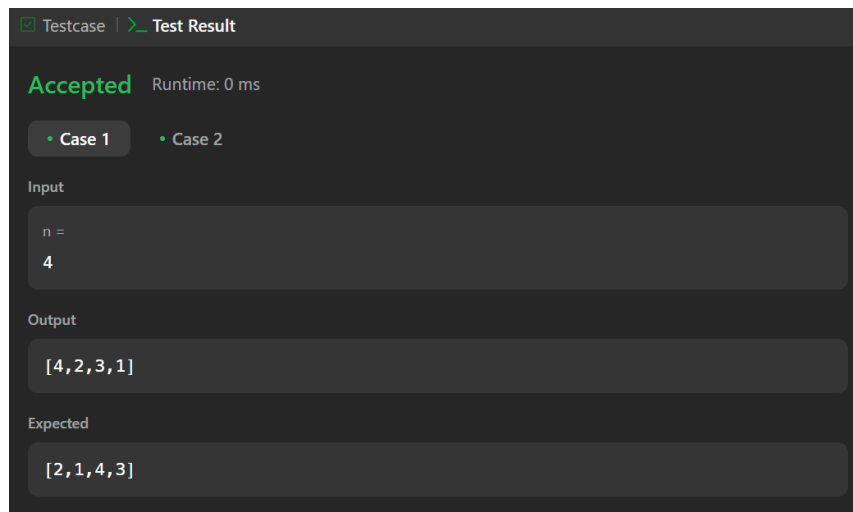
**Subject Code:** 22CSP-351

### Problem-1 [Beautiful Array]

#### 1. Implementation/Code:

```
class Solution {
public:
    vector<int> beautifulArray(int n) {
        if(n==1)
            return {1};
        vector<int> even = beautifulArray(n/2);
        vector<int> odd = beautifulArray(n-(n/2));
        vector<int> ans;
        for(auto e:even)
            ans.push_back(2*e);
        for(auto e:odd)
            ans.push_back((2*e)-1);
        return ans;
    }
};
```

#### 2. Output:



## Problem-2 [The Sky Line Problem]

### 1. Implementation/Code:

```
class Solution {
public:
    ListNode* deleteDuplicates(ListNode* head) {
        ListNode dummy(0, head);
        ListNode* prev = &dummy;
        while (head) {
            if (head->next && head->val == head->next->val) {
                while (head->next && head->val == head->next->val) {
                    head = head->next;
                }
                prev->next = head->next;
            } else {
                prev = prev->next;
            }
            head = head->next;
        }
        return dummy.next;
    }
};
```

### 2. Output:

☒ Testcase | ☒ Test Result

**Accepted** Runtime: 0 ms

• Case 1

• Case 2

Input

buildings =  
[[2,9,10],[3,7,15],[5,12,12],[15,20,10],[19,24,8]]

Output

[[2,10],[3,15],[7,12],[12,0],[15,10],[20,8],[24,0]]

Expected

[[2,10],[3,15],[7,12],[12,0],[15,10],[20,8],[24,0]]