



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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EXPERIMENT- 5

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Semester: 6

Date of Performance: 19.02.25

Subject Name: Advance Programming Lab-II

Subject Code: 22CSP-351

Problem-1 [Sort Colors]

1. Implementation/Code:

```
class Solution {
public:
    void sortColors(vector<int>& nums) {
        int low = 0, mid = 0, high = nums.size()-1;
        while(mid <= high){
            if(nums[mid] == 0){
                swap(nums[low], nums[mid]);
                low++;
                mid++;}
            else if(nums[mid] == 1){
                mid++;}
            else{
                swap(nums[mid], nums[high]);
                high--;}
        }
    };
};
```

2. Output:

Testcase | Test Result

Accepted Runtime: 0 ms

• Case 1 • Case 2

Input

nums =
[2,0,2,1,1,0]

Output

[0,0,1,1,2,2]

Expected

[0,0,1,1,2,2]



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Problem-2 [Kth Largest Element in an Array]

1. Implementation/Code:

```
class Solution {  
public:  
    int findKthLargest(std::vector<int>& nums, int k) {  
        std::sort(nums.begin(), nums.end(), std::greater<int>());  
        return nums[k-1];  
    }  
};
```

2. Output:

A screenshot of a coding platform's test result interface. At the top, there are two tabs: 'Testcase' (selected) and 'Test Result'. Below the tabs, the word 'Accepted' is displayed in green, followed by 'Runtime: 0 ms'. There are two buttons labeled 'Case 1' and 'Case 2', both with a green dot. Under the 'Input' section, there are two input fields: the first is labeled 'nums =' and contains the array '[3,2,1,5,6,4]'; the second is labeled 'k =' and contains the value '2'. Under the 'Output' section, there is one output field containing the value '5'. Under the 'Expected' section, there is one expected field containing the value '5'.

Testcase | Test Result

Accepted Runtime: 0 ms

• Case 1 • Case 2

Input

nums =
[3,2,1,5,6,4]

k =
2

Output

5

Expected

5