

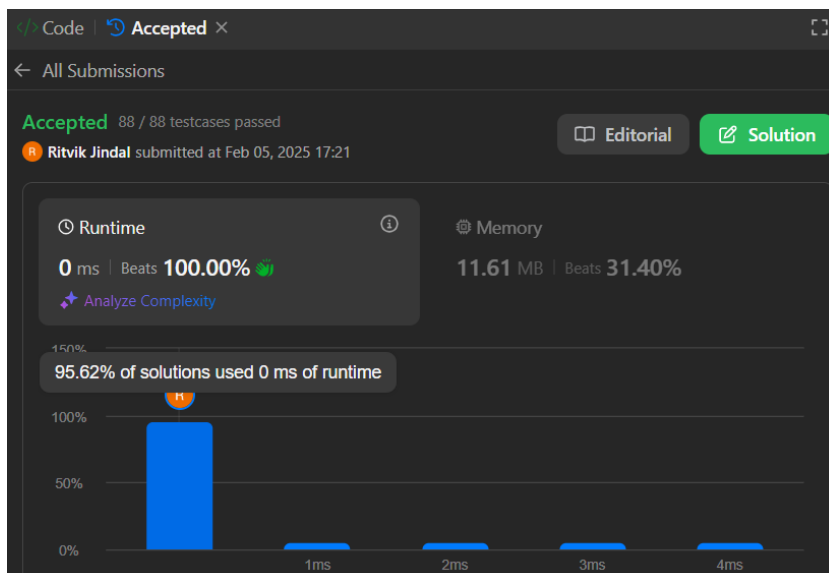
**Name – Ritvik Jindal**

**UID – 22BCS10235**

**Class – FL\_IOT\_604-A**

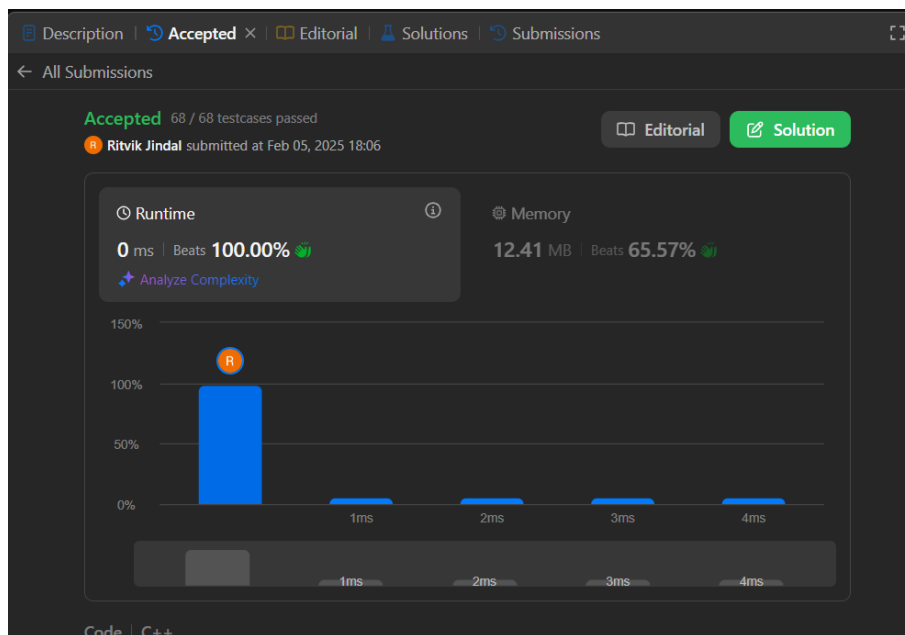
## 75. [Sort Colors](#)

```
class Solution {  
public:  
  
    void sortColors(vector<int>& nums) {  
        int n = nums.size();  
        for (int i = 1; i < n; ++i) {  
            int key = nums[i];  
            int j = i - 1;  
            while (j >= 0 && nums[j] > key) {  
                nums[j + 1] = nums[j];  
                j = j - 1;  
            }  
            nums[j + 1] = key;  
        }  
    }  
};
```



## 162. [Find Peak Element](#)

```
class Solution {  
public:  
    int findPeakElement(vector<int>& nums) {  
        int n = nums.size();  
  
        for (int i = 0; i < n; i++) {  
            bool left = true;  
            bool right = true;  
  
            if (i > 0 && nums[i] <= nums[i - 1])  
                left = false;  
  
            if (i < n - 1 && nums[i] <= nums[i + 1])  
                right = false;  
  
            if (left && right) {  
                return i;  
            }  
  
        }  
        return 0;  
    }  
};
```



## 240. Search a 2D Matrix II

```
class Solution {
public:
    bool binarySearch(vector<int> &arr, int low, int high, int x)
    {
        while (low <= high) {
            int mid = low + (high - low) / 2;
            if (arr[mid] == x)
                return true;

            if (arr[mid] < x)
                low = mid + 1;

            else
                high = mid - 1;
        }
        return false;
    }

    bool searchMatrix(vector<vector<int>>& matrix, int target) {
        for(int i=0;i<matrix.size();i++){
            if(target>=matrix[i][0] && target <= matrix[i].back()){
```

```

        int low =0;

        int high = matrix[0].size() -1;

        if(binarySearch(matrix[i],low,high,target))

            return true;

    }

    else{

        return false;

    }

}

return false;

}

};

```

### 191. Number of 1 Bits

```

class Solution {

public:

    int hammingWeight(int n) {

        int res=0;

        while(n>0){

            if(n & 1){

                res++;

            }

            n = n>>1;

        }


        return res;


    }


};

```

Accepted 598 / 598 testcases passed


 Ritvik Jindal submitted at Feb 05, 2025 15:58


 Editorial

 Solution

⌚ Runtime



0 ms | Beats 100.00% 

 Analyze Complexity

💾 Memory

8.24 MB | Beats 47.62%

