 <b>Marwadi</b> University	<b>Marwadi University</b> <b>Faculty of Technology</b> <b>Department of Information and Communication Technology</b>	
<b>Sem : 3</b>	<b>Name : VEDANT BHARAD</b>	
<b>Day : 44</b>	<b>Date : 30/11/2022</b>	<b>Enrollment No: 92100133023</b>

## CP Club 365Days Challenge

Date – 30/11/2022

Programming language – Any language

### Problem Statement


[https://practice.geeksforgeeks.org/problems/k-largest-elements4206/1?page=2&difficulty\[\]=1&category\[\]=Arrays&sortBy=submissions](https://practice.geeksforgeeks.org/problems/k-largest-elements4206/1?page=2&difficulty[]=1&category[]=Arrays&sortBy=submissions)

### Your Code:

```
// 0x44Day of 0x365Days challenge
// VEDANT BHARAD
// 30-11-2022
//{ Driver Code Starts
#include <bits/stdc++.h>

using namespace std;
// } Driver Code Ends
//User function template for C++
class Solution{
public:
    vector<int> kLargest(int arr[], int n, int k)
    {
        vector<int> ans;
        // 1 fastest solution
        priority_queue<int,vector<int>,greater<int>>>p;
        for(int i=0;i<n;i++){
            p.push(arr[i]);
            if(p.size()>k)
                p.pop();
        }


        while(p.size()>0){
            ans.push_back(p.top());
            p.pop();
        }
        reverse(ans.begin(),ans.end());
        //2
        // sort(arr, arr + n);
        // int con=1;
```

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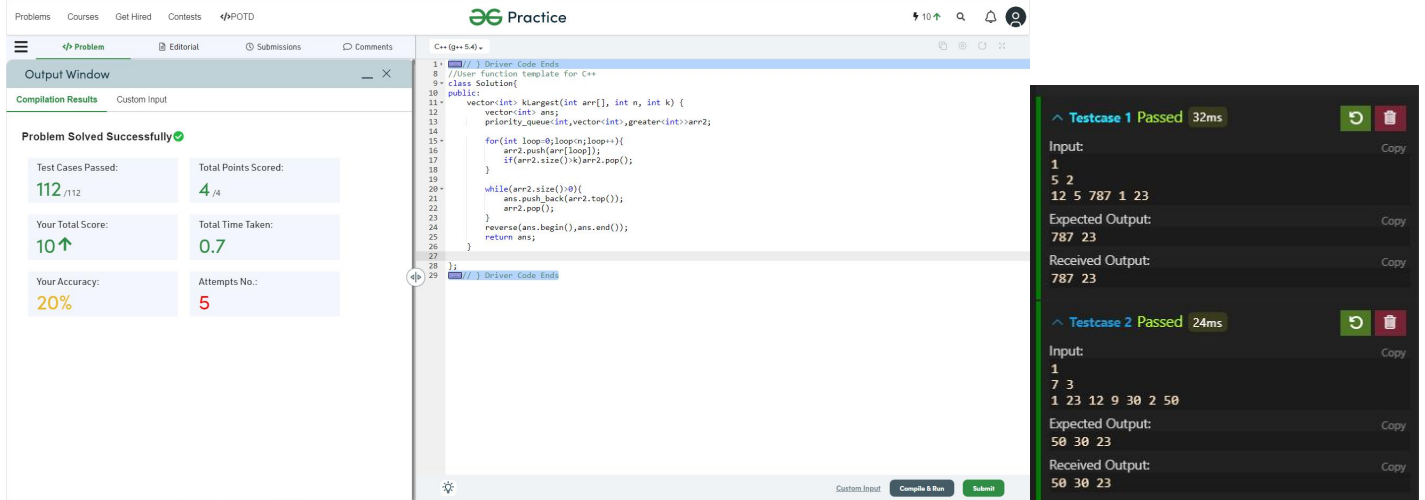
```

        // ans.insert(ans.end(),arr[n-1]);
        // n=n-1;
        // while (con<k)
        // {
        //     if(arr[n]!=arr[n-1])
        //     {
        //         ans.insert(ans.end(),arr[n-1]);
        //         con++;
        //     }
        //     n--;
        // }
        return ans;
    }
};
//{ Driver Code Starts.
int main() {
    int t;
    cin >> t;
    while (t--) {
        int n, k;
        cin >> n >> k;
        int arr[n];
        for (int i = 0; i < n; i++) {
            cin >> arr[i];
        }
        Solution ob;
        auto ans = ob.kLargest(arr, n, k);
        for (auto x : ans) {
            cout << x << " ";
        }
        cout << "\n";
    }
    return 0;
}
// } Driver Code Ends

```

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## Output (Screen Shot):



The screenshot displays a C++ code editor with a solution for a problem. The code uses a priority queue to find the k largest elements in an array. The output window shows 'Problem Solved Successfully' with 112 test cases passed, a total score of 4/4, a total time taken of 0.7, and an accuracy of 20%. The code is in C++ (g++ 5.4) and includes a priority queue and a vector to store the k largest elements.

## Understanding about problem:

- In this task there will be 3 inputs.
  1. Length of array
  2. K value
  3. Array it self
- In this task I need to return vector of largest numbers(k numbers) from main array.

**Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.**

**ALL THE BEST**  
Team CP Club