**[L1]Class - 10 ( STL Multiset and practice problem ) [Bangla]**

Class Video link :

[https://youtu.be/7nSN1SM4fRs](https://youtu.be/7nSN1SM4fRs?fbclid=IwAR3_AVk3GIc7_ThVoeZVeIHHlPuFIrb_HTpaFD_WHsJbrQy4rKmhmr9BfFw)

Discussed topics :

1) Introduction to multiset and Practice Problem

2) Multiset Operations ( Geeks for Geeks )

Link : [https://practice.geeksforgeeks.org/problems/multiset-operations/1](https://practice.geeksforgeeks.org/problems/multiset-operations/1?fbclid=IwAR3_AVk3GIc7_ThVoeZVeIHHlPuFIrb_HTpaFD_WHsJbrQy4rKmhmr9BfFw)

My Code : [https://paste.ubuntu.com/p/dzwNcSg8wX/](https://l.facebook.com/l.php?u=https%3A%2F%2Fpaste.ubuntu.com%2Fp%2FdzwNcSg8wX%2F%3Ffbclid%3DIwAR3_AVk3GIc7_ThVoeZVeIHHlPuFIrb_HTpaFD_WHsJbrQy4rKmhmr9BfFw&h=AT27hlUF_AOduhJ8ouDIgeVmb6_wJ_gQ8HSIodz7GnYWdtt9o6DG4TAA2hg8AWPIaMTmcBsD3_0At6ql12vNIAYzqLJaGkc-AMfF0Yxt11Y2IaSyxYUe3N-RqOWk&__tn__=-UK-R&c%5B0%5D=AT2vXiL466RNjDVjrsq7EM2EIhVD5xHy9VHsPD7rBfPJVbzJpeHEbIGfYlv1aDk1ufY08KfE5EVvjWyvsm_1rkvR0uf5VhZaTshLVFNbKljM2HEOodmWoN-jbe5XHMyojwdTlcSXVWAHGP3EqYkS6ZFHTyUckDUnqY5rNA6Qf9wn0h3zq6MWQyMsOg)

Class Tasks :

1) Multiset Operations ( Geeks for Geeks )

Link : [https://classroom.google.com/u/0/c/MTE2NTUzNTIxNDIx/a/MTQyNzc1MjM2MTk4/details](https://classroom.google.com/u/0/c/MTE2NTUzNTIxNDIx/a/MTQyNzc1MjM2MTk4/details?fbclid=IwAR3_AVk3GIc7_ThVoeZVeIHHlPuFIrb_HTpaFD_WHsJbrQy4rKmhmr9BfFw)

***#include <bits/stdc++.h>***

**using namespace std;**

***#define endl '\n'***

***#define optimeze() ios\_base::sync\_with\_stdio(0);cin.tie(0);cout.tie(0);***

**int main()**

**{**

**optimeze();**

**multiset<int>s;**

**s.insert(1);**

**s.insert(2);**

**s.insert(1);**

**s.insert(3);**

**s.insert(1);**

**s.insert(4);**

**s.insert(1);**

**s.insert(4);**

**cout<<s.size()<<endl;//8**

**for(auto u:s){**

**cout<<u<<" ";//1 1 1 1 2 3 4 4**

**}**

**cout<<endl<<s.count(4)<<endl;//2**

**s.erase(1);**

**for(auto u:s) cout<<u<<" ";//2 3 4 4**

**cout<<endl<<endl;**

**multiset<int>s1;**

**multiset<int>::iterator it;**

**s1.insert(1);**

**s1.insert(2);**

**s1.insert(1);**

**s1.insert(3);**

**s1.insert(1);**

**s1.insert(4);**

**s1.insert(1);**

**s1.insert(4);**

**/\***

**auto it=s1.find(1);**

**s1.erase(it);**

**for(auto u:s1) cout<<u<<" ";//1 1 1 2 3 4 4**

**cout<<endl<<endl;**

**\*/**

**it=s1.find(1);**

**s1.erase(it);**

**for(auto u:s1) cout<<u<<" ";//1 1 1 2 3 4 4**

**cout<<endl<<endl;**

**return 0;**

**}**

**"C:\Users\Md.Hamid Hosen\CLionProjects\untitled\cmake-build-debug\untitled.exe"**

**8**

**1 1 1 1 2 3 4 4**

**2**

**2 3 4 4**

**1 1 1 2 3 4 4**

**Process finished with exit code 0**

**problem link=**[**https://practice.geeksforgeeks.org/problems/multiset-operations/1**](https://practice.geeksforgeeks.org/problems/multiset-operations/1)

**code link=**[**https://paste.ubuntu.com/p/dzwNcSg8wX/**](https://paste.ubuntu.com/p/dzwNcSg8wX/)

***#include <bits/stdc++.h>***

**using namespace std;**

**multiset<int> multisetInsert(int arr[],int n); //Function to insert elements of array into a multiset and return a multiset**

**void multisetDisplay(multiset<int>s); //function to print the elements of the multiset**

**void multisetErase(multiset<int>&s,int x); //function to erase x from multiset if it exists**

**// } Driver Code Ends**

**//User function Template for C++**

**multiset<int> multisetInsert(int arr[],int n)**

**{**

**multiset<int> ret;**

**for ( int i = 0; i < n; i++ ) ret.insert ( arr[i] );**

**return ret;**

**}**

**void multisetDisplay(multiset<int>s)**

**{**

**for ( auto u : s ) cout << u << " ";**

**cout << endl;**

**}**

**void multisetErase(multiset<int>&s,int x)**

**{**

**if ( s.count ( x ) >= 1 ) {**

**s.erase ( x );**

**cout << "erased " << x << endl;**

**}**

**else cout << "not found" << endl;**

**}**

**// { Driver Code Starts.**

**int main() {**

**int t;**

**cin>>t;**

**while(t--)**

**{**

**int n;**

**cin>>n;**

**int arr[n]; //array of size n**

**for(int i=0;i<n;i++)**

**cin>>arr[i]; //Input the array**

**multiset<int>s=multisetInsert(arr,n); //call the insert function that returns a multiset**

**multisetDisplay(s);// display the inserted multiset**

**int x;**

**cin>>x; //x element that needs to be erased from multiset**

**multisetErase(s,x); //try to erase x from multiset**

**multisetDisplay(s); //print the multiset after erase operation**

**}**

**return 0;**

**}**

**"C:\Users\Md.Hamid Hosen\CLionProjects\untitled\cmake-build-debug\untitled.exe"**

**1**

**10**

**9 8 7 4 4 2 1 1 9 8**

**11 1 2 4 4 7 8 8 9 9**

**erased 1**

**2 4 4 7 8 8 9 9**

**Process finished with exit code 0**