

Assignment - 45 [A Job Ready Bootcamp in C++, DSA and IOT](#)

multiset

1. Create a c++ program using multiset and returns an iterator to the first element in the multiset $\rightarrow O(1)$
2. Create a c++ program using multiset and returns an iterator to the theoretical element that follows the last element in the multiset $\rightarrow O(1)$
3. Create a c++ program using multiset and returns the number of elements in the multiset $\rightarrow O(1)$
4. Create a c++ program using multiset and returns the maximum number of elements that the multiset can hold $\rightarrow O(1)$
5. Create a c++ program using multiset and returns whether the multiset is empty $\rightarrow O(1)$
6. Create a c++ program using multiset and inserts the element x in the multiset $\rightarrow O(\log n)$
7. Create a c++ program using multiset and removes all the elements from the multiset $\rightarrow O(n)$
8. Create a c++ program using multiset and removes all the occurrences of x $\rightarrow O(\log n)$
9. Create a c++ program using multiset and remove only one instance of element from multiset having same value
10. Unlike a set, a multiset may contain multiple occurrences of same number. The multiset equivalence problem states to check if two given multisets are equal or not. For example let $A = \{1, 2, 3\}$ and $B = \{1, 1, 2, 3\}$. Here A is set but B is not (1 occurs twice in B), whereas A and B are both multisets. More formally, "Are the sets of pairs defined as $\{(a, \text{frequency}(a)) \mid a \in \mathbf{A}\}$ equal for the two given multisets?" Given two multisets A and B, write a program to check if the two multisets are equal.