

Kyla Wilson

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J00813814

1.)

Hashtable elements

Vector commonElements

```
for( i < list.size) {  
    if(elements does not contain list[i]) {  
        insert the value into elements  
    } else {  
        Append element into commonElements  
    }  
}
```

2.)

Because the algorithm has to loop through the entire list, it is
 $O(n)$

3.)

Because my algorithm uses a hashmap, the space complexity is also
 $O(n)$

4.)

Enter the number of lists: 5
Enter the number of elements per list: 25
Enter the maximum value for an element: 10
Enter the size of the hash table: 7

Elements generated in List # 0
5 3 2 2 6 2 5 9 1 7 2 8 8 8 6 9 1 1 6 5 6 6 5 8 3
Common elements in list # 0
2 2 5 2 8 8 6 9 1 1 6 5 6 6 5 8 3

Elements generated in List # 1
0 1 5 6 8 6 3 7 0 8 5 8 8 0 5 1 5 3 1 0 9 7 1 7 5
Common elements in list # 1
6 0 8 5 8 8 0 5 1 5 3 1 0 7 1 7 5

Elements generated in List # 2
2 2 2 6 3 1 8 7 8 1 1 9 6 2 2 3 1 6 7 4 5 2 5 3 3
Common elements in list # 2
2 2 8 1 1 6 2 2 3 1 6 7 2 5 3 3

Elements generated in List # 3
4 4 5 9 8 5 7 0 4 0 7 4 6 9 8 7 5 6 4 6 9 0 5 1 5
Common elements in list # 3
4 5 4 0 7 4 9 8 7 5 6 4 6 9 0 5 5

Elements generated in List # 4
1 1 0 8 7 0 9 4 0 3 5 2 4 5 8 1 0 4 4 9 1 5 7 9 2
Common elements in list # 4
1 0 0 4 5 8 1 0 4 4 9 1 5 7 9 2

Common elements in all the lists
5 3 2 2 6 2 5 9 1 7 2 8 8 8 6 9 1 1 6 5 6 6 5 8 3
sh: pause: command not found
Program ended with exit code: 0