

705. Design HashSet

Easy  Topics 

Design a HashSet without using any built-in hash table libraries.

Implement `MyHashSet` class:

- `void add(key)` Inserts the value `key` into the HashSet.
- `bool contains(key)` Returns whether the value `key` exists in the HashSet or not.
- `void remove(key)` Removes the value `key` in the HashSet. If `key` does not exist in the HashSet, do nothing.

Example 1:

Input

```
["MyHashSet", "add", "add", "contains", "contains", "add", "contains", "remove", "contains",  
[[], [1], [2], [1], [3], [2], [2], [2], [2]]
```

Output

```
[null, null, null, true, false, null, true, null, false]
```

Explanation

```
MyHashSet myHashSet = new MyHashSet();  
myHashSet.add(1);      // set = [1]  
myHashSet.add(2);      // set = [1, 2]  
myHashSet.contains(1); // return True  
myHashSet.contains(3); // return False, (not found)  
myHashSet.add(2);      // set = [1, 2]  
myHashSet.contains(2); // return True  
myHashSet.remove(2);    // set = [1]  
myHashSet.contains(2); // return False, (already removed)
```

Constraints:

- $0 \leq \text{key} \leq 10^6$
- At most 10^4 calls will be made to `add`, `remove`, and `contains`.