Collections Assignment

1)Remove all elements from a linked list of integers that have value *val*.

Example:

Input: 1->2->6->3->4->5->6, *val* = 6

Output: 1->2->3->4->5

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

To be specific, your design should include these functions:

* add(value): Insert a value into the HashSet.
* contains(value): Return whether the value exists in the HashSet or not.
* remove(value): Remove a value in the HashSet. If the value does not exist in the HashSet, do nothing.

3)Suppose you have a random list of people standing in a queue. Each person is described by a pair of integers (h, k), where h is the height of the person and k is the number of people in front of this person who have a height greater than or equal to h. Write an algorithm to reconstruct the queue.

Note:

The number of people is less than 1,100.

Example

Input:

[[7,0], [4,4], [7,1], [5,0], [6,1], [5,2]]

Output:

[[5,0], [7,0], [5,2], [6,1], [4,4], [7,1]]