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

To be specific, your design should include these functions:

* put(key, value) : Insert a (key, value) pair into the HashMap. If the value already exists in the HashMap, update the value.
* get(key): Returns the value to which the specified key is mapped, or -1 if this map contains no mapping for the key.
* remove(key) : Remove the mapping for the value key if this map contains the mapping for the key.

**Example:**

MyHashMap hashMap = new MyHashMap();

hashMap.put(1, 1);

hashMap.put(2, 2);

hashMap.get(1);            // returns 1

hashMap.get(3);            // returns -1 (not found)

hashMap.put(2, 1);          // update the existing value

hashMap.get(2);            // returns 1

hashMap.remove(2);          // remove the mapping for 2

hashMap.get(2);            // returns -1 (not found)

**Note:**

* All keys and values will be in the range of [0, 1000000].
* The number of operations will be in the range of [1, 10000].
* Please do not use the built-in HashMap library.