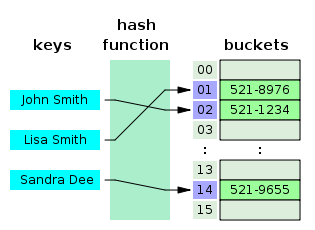
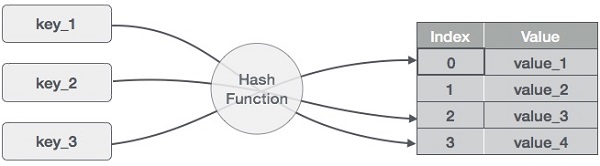
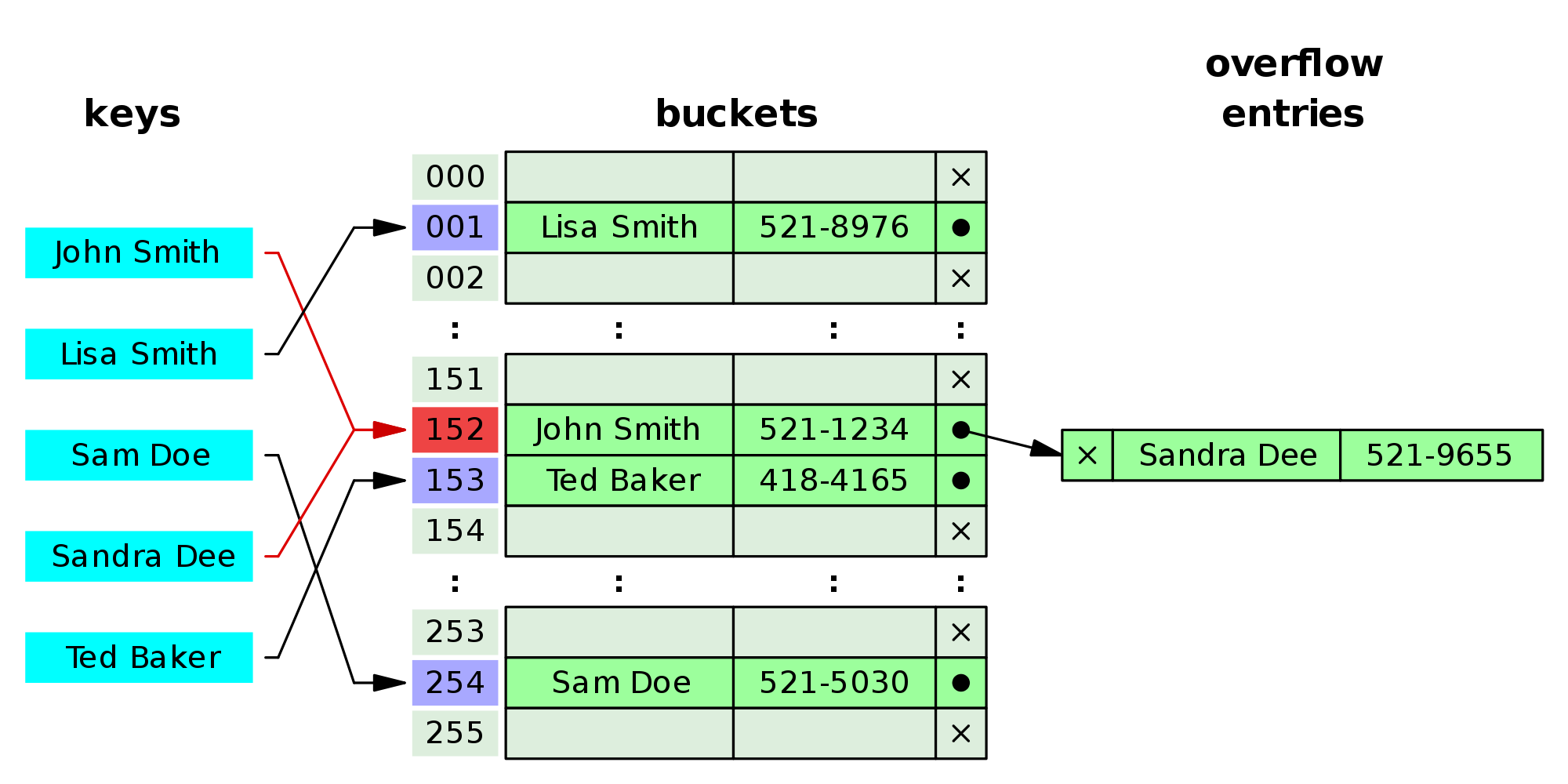
**Hash Table**

std::unordered\_map\multimap, std::unordered\_set\multiset all use hash table.





Input: Key

Operation Hash(Key) is called.

Output: Index

Every time you enter the same key, you will get the original index. Thanks to that, we get O(1) lookup time!

**Hash collisions**

A basic requirement is that the function should provide a uniform distribution of hash values. A non-uniform distribution increases the number of collisions and the cost of resolving them.