|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Method | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Chaining | 33 → 11→ 22 | 1 | 24 → 13 |  |  |  |  | 18 |  | 31→ 42 |  |
| Lining probing | 22 | 1 | 13 | 11 | 24 | 33 |  | 18 |  | 42 | 31 |
| Double-Hashing | 22 | 1 | 13 |  | 11 | 18 | 31 | 24 | 33 | 42 |  |

1. We cannot use h2 as a hash function and h1 as a step function. Because with h1 as a step function, we may get a result of 0 and all the collisions wont be solved as all nodes which mod 11 equals 0 will go into the same place.
2. Because the steps will always get us to the same cells. If those cells are occupied we may not find an available slot even if the hast table if not full.
3. ***“Open addressing****, or****closed hashing****, is a method of*[*collision resolution in hash tables*](https://en.wikipedia.org/wiki/Hash_table#Collision_resolution)*. With this method a hash collision is resolved by****probing****, or searching through alternate locations in the array (the probe sequence) until either the target record is found, or an unused array slot is found, which indicates that there is no such key in the* table.” – Wiki

To delete k in the hash table which uses open addressing. Each table entry will contain a special mark to indicate if it was deleted.  
While searching for a key, if we encounter an entry which is marked as deleted, we continue to search.