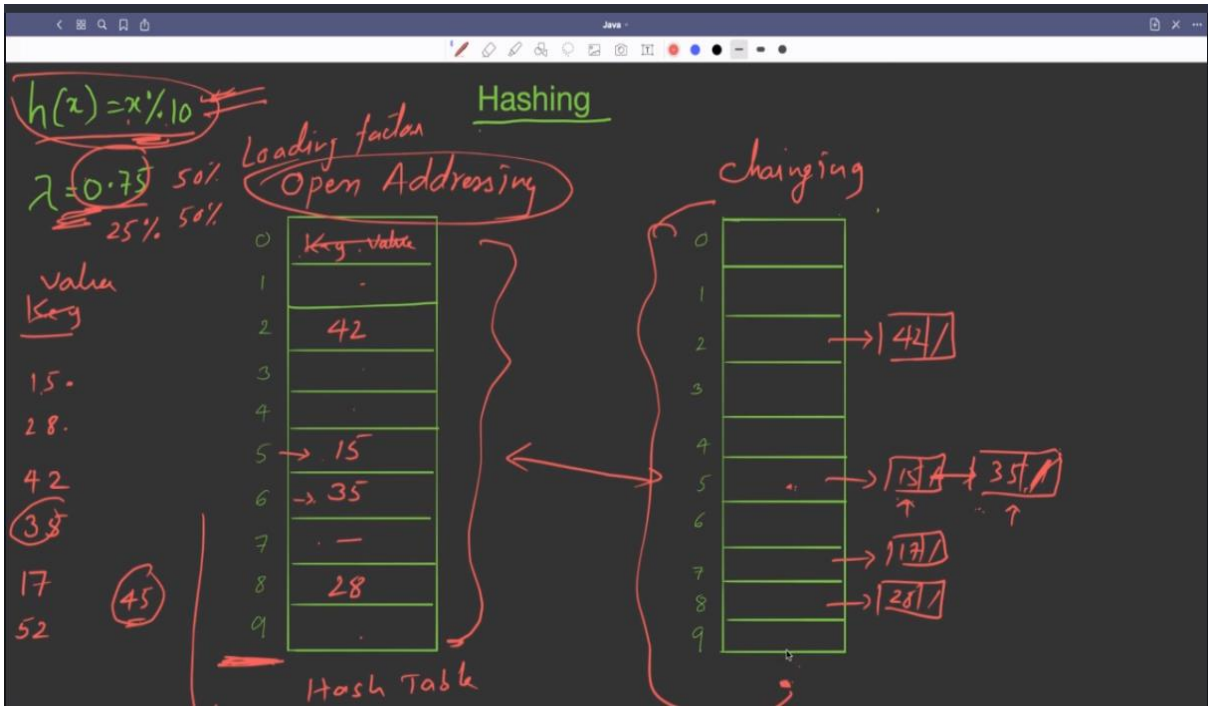
Hashing –

- HashSet- only value
- HashMap- key and value
- LinkedHashSet
- LinkedHashMap
- Hashtable(Legacy class)
- Properties
  Hashing function – h(x) = x%10 (It will take constant time)
  Ex- 15 – 15%10
  10/15- remainder – 5 (mod)
  28%10
  10/28 – remainder – 8 (mod)
- In hash table 25% blank spaces must be there.
- Use only 75%of the table.
  This percentage of filing is called Loading Factor.
- Open Addressing – Storing a key in the next place, If there is a collision is called Open Addressing.
- chaining in hashing- At each place more than one keys can be inserted and here we don't have a problem of loading factor, we can go on increasing the chain size as much as we want.


Java
h(x) = x % 10
Hashing
λ = 0.75
50%
25%
50%
Loading factor
Open Addressing
chaining
Value
Key
15
28
42
38
17
52
45
0
1
2
3
4
5
6
7
8
9
42
15
35
17
28
Hash Table