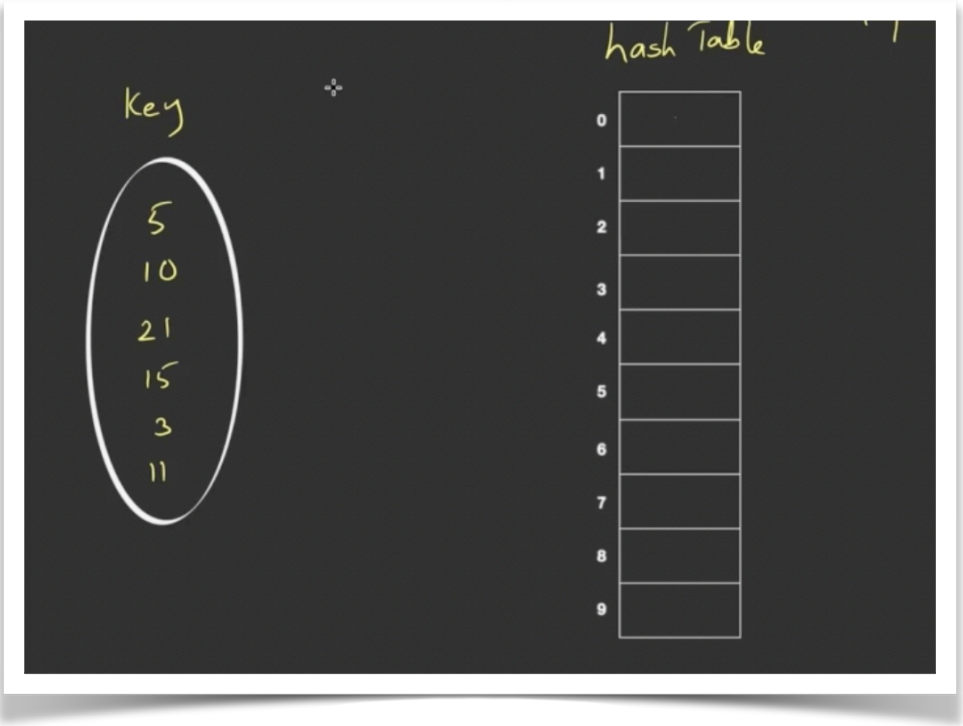
Set internals

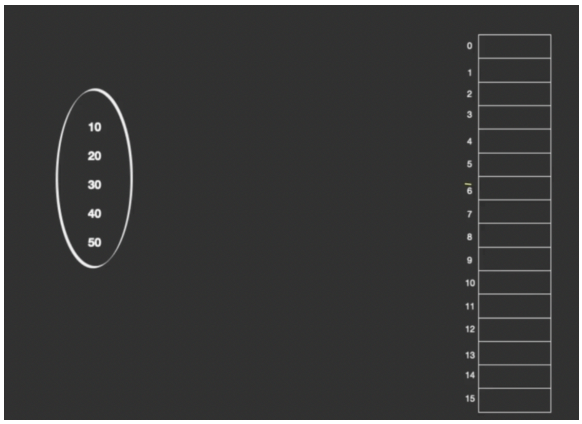


- Lets see how hash table works internally
- We have 5 , 10 , 21 , 15 , 3 , 11
- It uses hash function which is x%10 (its taking 10 because we have numbers between 0 to 10)
- How this keys are stored in hash table lets see

we take 5 . Take it in hash function
h(x) = x%10
h(5) = 5%10 = 5
So it is stored hash table 5

we take 10 .
h(10) = 10%10 = 0
So it is stored in the place of 0

h(21) = 21%10 = 1
h(11) = 11%10 = 1
We got 1 for both 21 and 11 so both should be stored in 1 in hash table this is said as collision
Then it is saved as a form of linked list



Here we are taking mode 16
h(10) = 10%16=10
h(20) = 20%16=4
h(30) = 30%16=14
h(40) = 40%16=8
h(50) = 50%16=2

```
>>> s = {10,20,30,40,50}
>>> s
{50, 20, 40, 10, 30}
>>> s.add(60)
>>> s
{50, 20, 40, 10, 60, 30}
>>> s.add(70)
>>> s
{50, 20, 70, 40, 10, 60, 30}
>>>
```

h(60) = 10%16=12
h(70) = 20%16=6
h(18) = 30%16=2
h(31) = 40%16=15