Hash Table

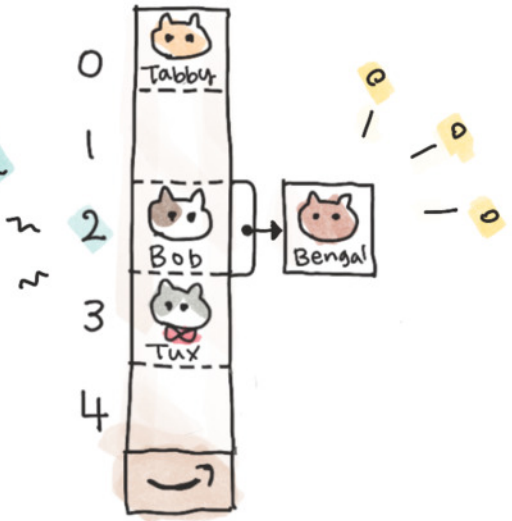
@girlie_mac

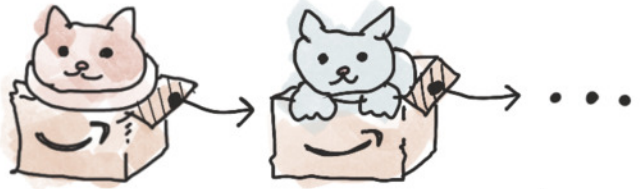
Collision!

Now we want to add more data.
Let's add "Bengal".

"Bengal" → # → 617 % 5 = 2

But [2] slot has been taken by "Bob" already! = collision!
so let's chain Bengal next to Bob! = chaining



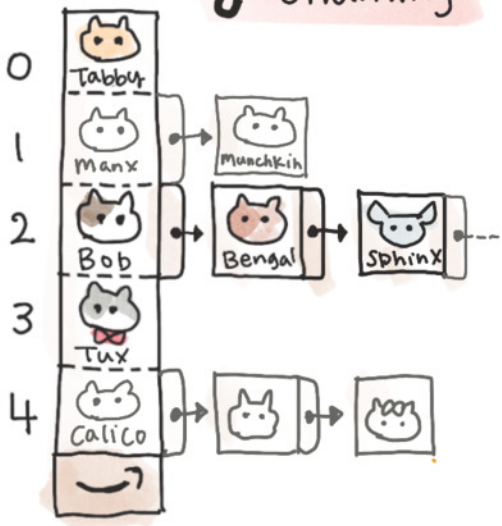


key: "Bengal"
value: "Dosa"

"Sphinx"
"Fish & Chips"

Keep adding data

chaining



searching for data

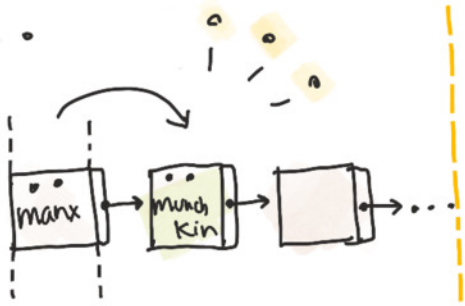
Let's look up the value for "Bob"

① Get the hash → 307
② Get the index → 307 % 5 = 2
③ Look up Array [2] → found!

← O(1)

Let's look up "munchkin"

① Hash → 861
② Index → 861 % 5 = 1
③ Array [1] → "manx"
④ Operate a linear-search to find "munchkin"



↳ Average O(n)