

# Extensible Hash Table

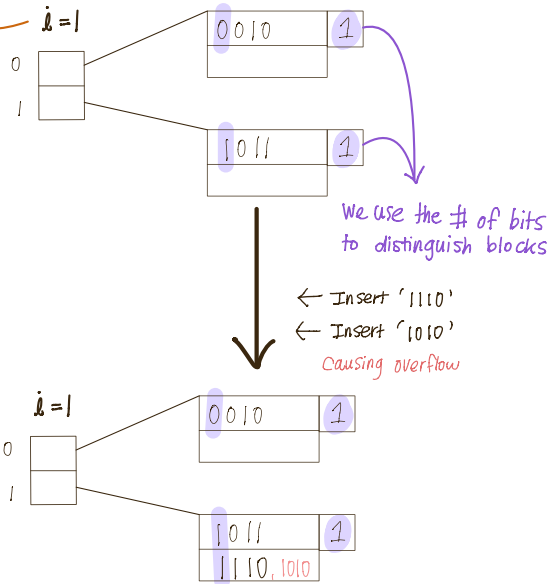
## Dynamic Hash Indexing Using Extensible Hash Table

↳ Allows hash index & no overflow in bucket

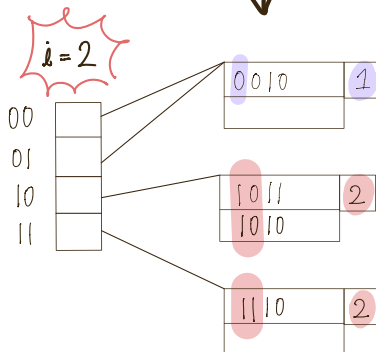
We use 'i' to determine the correct bucket

Gives a pointer to the buckets

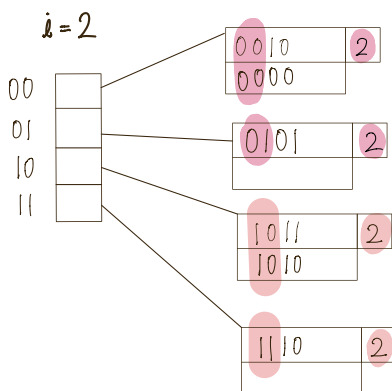
### Bucket Array



Extend the hash table (bucket array) from  $i=1$  to 2



← Insert '0000'  
← Insert '0101'

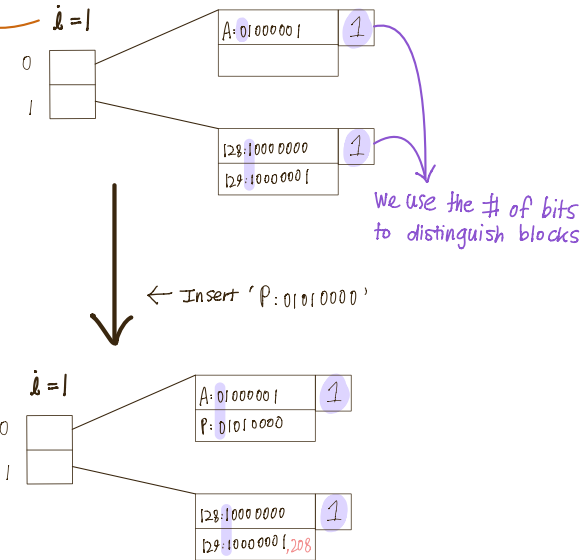


Sample Question: Given an extensible hash table,

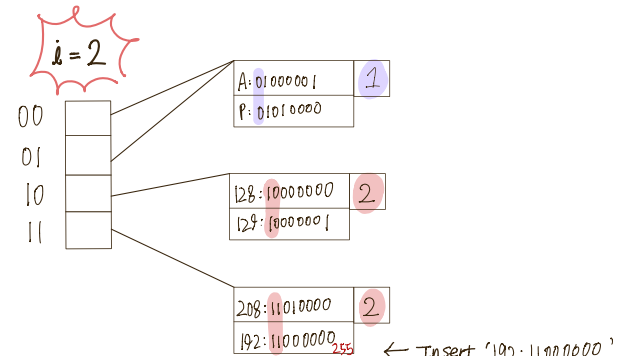
If a key is a letter → ASCII binary representation  
a number → binary representation

We use 'i' to determine the correct bucket

### Bucket Array



Extend the bucket array from  $i=1$  to 2



Extend the bucket array from  $i=2$  to 3

