## Chapter 3.3 Hash Table

*Definition:*

*Hash Table can be used as Index and Main Memory Data Structure. In such structure, there has Hash Function h, and it uses Data Key as Parameter and calculate the Integer which belongs to (0, B - 1), among which B is the number of bucket.*

Bucket Array, is an array with the Sequence from 0 to B - 1, among which there includes B Bucket Array, among which includes B linked list heads, each one corresponding to one bucket in the Array. If Query Key of Record equals to K, then we can link the record to bucket index h(K) to store Query Key.

### Chapter 3.3.1 Auxiliary Hash Table

### Chapter 3.3.2 Insertion into Hash Table

### Chapter 3.3.3 Deletion from Hash Table

### Chapter 3.3.4 Efficient of Hash Index

### Chapter 3.3.5 Extensible Hash Table

### Chapter 3.3.6 Insertion into Extensible Hash Table

### Chapter 3.3.7 Linear Hash Table

### Chapter 3.3.8 Insertion into Linear Hash Table