

## UNIT-II

### COLLISION RESOLUTION TECHNIQUES

In general, a hashing function can map several keys into the same address. That leads to a *collision*. The colliding records must be stored and accessed as determined by a *collision – resolution techniques*.

There are two broad classes of such techniques:

**Open Hashing** (also called **separate chaining**) and

**Closed Hashing** (also called open addressing)

The difference between the two has to do with whether collision are stored outside the table (open hashing), or whether collision result in storing and of the records at another slot in the table (closed hashing).

The particular hashing method that one uses depends on many factors. One important factor is the ratio of the no.of keys in the table to the no.of hash addresses. It is called load factor, and is given by: **Load factor ( $\alpha$ ) =  $n/m$** ,  
where **n** is no.of keys in the table and **m** is no.of hash address (table size)