**Hashing** is the process of mapping large amount of data item to a smaller table with the help of a hashing function. The essence of hashing is to facilitate the next level searching method when compared with the linear or binary search. The advantage of this searching method is its efficiency to hand vast amount of data items in a given collection (i.e. collection size).

Due to this hashing process, the result is a **Hash data structure** that can store or retrieve data items in an average time disregard to the collection size.

**Hash Table** is the result of storing the hash data structure in a smaller table which incorporates the hash function within itself. The Hash Function primarily is responsible to map between the original data item and the smaller table itself. Here the mapping takes place with the help of an output integer in a consistent range produced when a given data item (any data type) is provided for storageand this output integer range determines the location in the smaller table for the data item. In terms of implementation, the hash table is constructed with the help of an array and the indices of this array are associated to the output integer range.