Indexing is a way to optimize the performance of a database by minimizing the number of disk accesses required when a query is processed. It is a data structure technique which is used to quickly locate and access the data in a database.

Database indexes are special lookup tables consisting of two columns. The first column is the search key, and the second one is the data pointer. The keys are the values you want to search and retrieve from your database table, and the pointer or reference stores the disk block address in the database for that specific search key. The key fields are sorted so that it accelerates the data retrieval operation for all your queries.

Indexing depends heavily on the file organization mechanism used. Usually, there are two types of file organization methods used in database indexing to store data.

1. **Ordered Index File:** This is the traditional method of storing index data. In this method, the key values are sorted in a particular order.
2. **Hash File organization:** In this file organization method, a hash function determines the location or disk block where a record is stored.

**There are generally three methods of Database Indexing. They are:**

* **Clustered Indexing**

In clustered indexing, one single file can store more than two data records.

* **Non-clustered Indexing**

Non-clustered indexing refers to a type of indexing where the order of the index rows is not the same as how the original data is physically stored. Instead, a non-clustered index points to the data storage in the database.

* **Multi-Level Indexing**

Multi-level indexing is used when the number of indices is very high, and it can't store the primary index in the main memory.