Describe the purpose of database indexing and types of indexes in MySQL?

Database indexing is a technique used to optimize the retrieval of data from a database table. The primary purpose of indexing is to improve the speed of data retrieval operations, such as SELECT queries, by creating a data structure that allows the database management system (DBMS) to quickly locate the rows that match a specific condition. Without indexing, the DBMS would have to scan the entire table to find the requested data, which can be inefficient, especially in large tables. Here are some key purposes of database indexing:

-Improved Query Performance:

-Faster Sorting and Grouping: