38 Lecture - CS403

Important Subjective

1. What is an ordered index in a database?

Answer: An ordered index is a type of index used to store data in a specific order based on one or more columns. This allows for faster retrieval of data based on the order of the index.

How are ordered indices implemented in a database?

Answer: Ordered indices can be implemented using a B-tree or a similar data structure.

What is a primary key index in a database?

Answer: A primary key index is an index that includes only unique values of a particular column and is used to enforce the uniqueness constraint on that column.

What is a clustered index in a database?

Answer: A clustered index is an index that stores data in a specific order based on a particular column, allowing for fast retrieval of data in that order.

What is the difference between a clustered index and a non-clustered index?

Answer: A clustered index stores data in a specific order, while a non-clustered index does not. Non-clustered indexes are used to speed up data retrieval operations for non-clustered queries.

How do ordered indices improve query performance?

Answer: Ordered indices allow for faster retrieval of data based on the order of the index, making it useful for range queries and sorting operations.

What is the downside of using too many ordered indices in a database?

Answer: Using too many ordered indices can increase storage requirements and slow down insert and update operations.

Can multiple ordered indices be created on the same table in a database?

Answer: Yes, multiple ordered indices can be created on the same table in a database.

What is a composite index in a database?

Answer: A composite index is an index that is based on multiple columns.

How can index fragmentation affect database performance?

Answer: Index fragmentation can slow down data retrieval operations, making it important to regularly defragment and maintain ordered indices.