

24 Lecture - CS403

Important Mcqs

1. **What is vertical partitioning in a database?**

- A) Dividing tables horizontally
- B) Dividing tables vertically
- C) Dividing data into multiple databases
- D) None of the above

Answer: B) Dividing tables vertically

Which of the following is a benefit of vertical partitioning?

- A) Improved data redundancy
- B) Improved data consistency
- C) Improved query performance
- D) Reduced storage space

Answer: C) Improved query performance

What is another name for vertical partitioning?

- A) Row partitioning
- B) Column partitioning
- C) Table partitioning
- D) None of the above

Answer: B) Column partitioning

When is vertical partitioning particularly useful?

- A) When a database contains a large number of rows
- B) When a database contains a small number of columns
- C) When certain columns are accessed more frequently than others
- D) When a database is used for infrequent data access

Answer: C) When certain columns are accessed more frequently than others

Which of the following is a potential drawback of vertical partitioning?

- A) Increased storage space
- B) Reduced query performance
- C) Increased data redundancy
- D) Reduced data consistency

Answer: A) Increased storage space

What is the main goal of vertical partitioning?

- A) To improve data redundancy
- B) To improve query performance
- C) To improve data consistency
- D) To reduce storage space

Answer: B) To improve query performance

Which of the following is an example of vertical partitioning?

- A) Splitting a table into multiple tables based on a date range

- B) Splitting a table into multiple tables based on location
- C) Splitting a table into multiple tables based on column values
- D) None of the above

Answer: C) Splitting a table into multiple tables based on column values

What is a potential challenge of managing a vertically partitioned database?

- A) Ensuring data consistency across partitions
- B) Managing large amounts of data within a single table
- C) Maintaining sufficient storage capacity
- D) None of the above

Answer: A) Ensuring data consistency across partitions

Which of the following is a benefit of vertical partitioning in a distributed database?

- A) Improved query performance
- B) Improved data redundancy
- C) Improved data consistency
- D) None of the above

Answer: A) Improved query performance

What is a key consideration when deciding whether to use vertical partitioning?

- A) The number of rows in the database
- B) The number of columns in the database
- C) The access patterns for the data
- D) The amount of available storage space

Answer: C) The access patterns for the data