44 Lecture - CS403

Important Mcqs

1. What is the Uncommitted Update Problem?

a) When a transaction updates a record, but the update is not yet committed

b) When a transaction deletes a record, but the deletion is not yet committed

c) When a transaction reads a record, but the record is not yet committed

Answer: a

What are the consequences of the Uncommitted Update Problem?

a) Dirty reads

b) Non-repeatable reads

c) Phantom reads

d) All of the above

Answer: d

Which concurrency control mechanisms are used to prevent the Uncommitted Update Problem?

- a) Locking
- b) Timestamps
- c) Both locking and timestamps
- d) None of the above

Answer: c

Which type of read anomaly can occur due to the Uncommitted Update Problem?

- a) Dirty read
- b) Non-repeatable read
- c) Phantom read
- d) All of the above

Answer: a

Which of the following is not a consequence of the Uncommitted Update Problem?

- a) Deadlock
- b) Dirty read
- c) Non-repeatable read
- d) Phantom read

Answer: a

Which of the following is a way to prevent the Uncommitted Update Problem?

- a) Increasing the transaction isolation level
- b) Decreasing the transaction isolation level
- c) Not using any concurrency control mechanism
- d) None of the above

Answer: a

Which of the following is an example of the Uncommitted Update Problem?

a) A transaction updates a record, but the update is not yet committed

b) A transaction reads a record, but the record is not yet committed

c) A transaction deletes a record, but the deletion is not yet committed Answer: a

Which of the following describes a dirty read?

a) When a transaction reads a record that has been updated but not yet committed
b) When a transaction reads a record that has been deleted but not yet committed
c) When a transaction reads a record that has been inserted but not yet committed
Answer: a

Which of the following describes a non-repeatable read?

a) When a transaction reads a record that has been updated but not yet committed

b) When a transaction reads a record that has been deleted but not yet committed
 c) When a transaction reads the same record multiple times and gets different results
 Answer: c

Which of the following is a potential consequence of using a low transaction isolation level?

a) Reduced risk of the Uncommitted Update Problem

b) Increased risk of the Uncommitted Update Problem

c) No effect on the risk of the Uncommitted Update Problem

Answer: b