# 23 Lecture - CS403

## Important Mcqs

1. **What is a physical record?**
   a) The conceptual model of a database
   b) The actual data stored in a database on disk
   c) The logical model of a database
   d) The metadata associated with a database
   Answer: b) The actual data stored in a database on disk

   **What is denormalization?**
   a) The process of breaking normal form rules in a database to improve performance
   b) The process of improving the normalization of a database
   c) The process of removing redundant data from a database
   d) The process of optimizing database queries
   Answer: a) The process of breaking normal form rules in a database to improve performance

   **What is the purpose of denormalization?**
   a) To reduce the complexity of database queries
   b) To improve database performance
   c) To simplify the database design
   d) To increase data consistency in a database
   Answer: b) To improve database performance

   **What are the risks of denormalization?**
   a) Data redundancy and inconsistency
   b) Database performance degradation
   c) Increased query complexity
   d) All of the above
   Answer: d) All of the above

   **What is data redundancy?**
   a) The process of breaking normal form rules in a database to improve performance
   b) The duplication of data in a database
   c) The process of normalizing a database
   d) The metadata associated with a database
   Answer: b) The duplication of data in a database

   **Which normal form does denormalization violate?**
   a) First Normal Form
   b) Second Normal Form
   c) Third Normal Form
   d) Fourth Normal Form
   Answer: c) Third Normal Form

   **What is the primary goal of normalization?**
   a) To eliminate data redundancy

b) To improve database performance
c) To simplify the database design
d) To increase data inconsistency in a database
Answer: a) To eliminate data redundancy

**Which of the following is a disadvantage of denormalization?**
a) Reduced query complexity
b) Increased data redundancy
c) Improved database performance
d) Simplified database design
Answer: b) Increased data redundancy

**What is the consequence of data inconsistency?**
a) Increased query performance
b) Improved data quality
c) Increased risk of errors and inaccuracies
d) Simplified database design
Answer: c) Increased risk of errors and inaccuracies

**Which of the following is an example of denormalization?**
a) Combining two tables into one
b) Normalizing a database
c) Adding a new column to a table
d) Creating a new index on a table
Answer: a) Combining two tables into one