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| **Discuss** the key advantages of using a Database Management System (DBMS) with examples. |
| **Describe** the following database terms and their significance: Database Schema, DDL, Degree of Relationship, and Entity. |
| **Develop** SQL queries to:   1. Rename the 'Suppliers' table to 'Vendors'. 2. (ii) Assign SELECT and UPDATE privileges on the 'Sales' table to the user 'John'. |
| **Explain** the following database concepts with suitable examples: Cardinality, Weak Entity, Program Data Independence, DML, and Value Sets. |
| **Differentiate** between logical data independence and physical data independence with appropriate examples. |
| **Construct** SQL queries to:   1. Alter the data type of the 'Contact Number' column in the 'Employees' table. 2. Insert new employee details into the 'Employees' table with relevant attributes. |
| **Create** an E-R diagram for a university database with entities such as Students, Courses, and Instructors. |
| **Explain** the roles of Super Key, Candidate Key, Primary Key, and Foreign Key in database design with suitable examples. |
| **Illustrate** the concepts of Entity Integrity and Referential Integrity constraints with examples, and explain why they are essential in a database. |
| **Draw** an E-R diagram for an online shopping system that manages customers, products, and orders. |
| **Discuss** the update operations and dealing with constraint violations with suitable examples. |
| **Explain** how Referential Integrity Constraints help maintain data consistency in a database. Provide an example. |
| **Illustrate the three-level architecture of a database system and discuss its practical applications in managing and organizing data.** |
| **Summarize the concept of a data model and discuss its main categories with suitable examples.** |
| **Develop SQL queries to:**   1. **Revoke DELETE permissions from user 'Mike' on the 'Orders' table.** 2. **Drop the 'Old\_Orders' table from the database.** |
| **Illustrate how various types of attributes are defined in the ER model with real-life examples.** |
| **Explain the following database concepts with suitable examples: Cardinality, Weak Entity, Program Data Independence, DML, and Value Sets.** |
| **Construct SQL queries to:**   1. **Insert multiple records into the 'Products' table with Product ID, Name, and Price in a single command.** 2. **Modify the 'Customers' table by adding a new column called 'Email'.** 3. **Delete all orders from the 'Orders' table where the order total is less than $50.”** |
| **Develop an E-R diagram for a banking system that outlines essential entities, their attributes, and the relationships between those entities.** |
| **Outline the various types of constraints in the relational model and explain their importance with examples.** |
| **Discuss the key characteristics of a relation in the relational model and explain why they are important.** |
| **Demonstrate the concepts of generalizations and specialization with examples.** |
| **Describe the following relational model concepts with examples to illustrate their meaning: Domain, Attribute, Tuple, Relation, Relation Schema, and Relation State.** |
| **Explain the following database constraints with suitable examples: Entity Integrity Constraints, Referential Integrity Constraints, Semantic Integrity Constraints, State Constraints, and Transition Constraints.** |