



# **Domain 1: Relational Database Fundamentals**

1.1 Identify basic database types and management systems

1.2 List common database languages and their purposes, and identify language subsets of Structured Query Language (SQL).

1.3 Identify relational data modeling schemas, characteristics and manipulation

# **Domain 2: Relational Database Design and Application**

- 2.1 Identify the steps of the database planning life cycle
- 2.2 Identify the activities in the conceptual design phase of a database

## **Domain 3: Normalization and Database Design**

- 3.1 Apply normalization techniques and processes
- 3.2 Describe logical database design steps and practices

3.3 Interpret logical data models into a physical data model that can be implemented by a particular database management system (DBMS)

## Domain 4: Structured Query Language (SQL)

- 4.1 Identify SQL commands and syntax
- 4.2 Create statements using Data Definition Language (DDL)
- 4.3 Form commands using Data Manipulation Language (DML)

4.4 Use Data Control Language (DCL) statements to control the access to data in a database and to grant users permissions for data operations

### **Domain 5: Relational Algebra and Databases**

5.1 Define and describe the use of relational algebra in order to create new relationships from existing database relations

5.2 Compose joins in a database

#### **Domain 6: Transactions, Currency Control and Database Security**

- 6.1 Create transactions and enable currency control
- 6.2 Identify elements of database security