Describe the classification of database language. Which type of language is SQL ?

1. Data Definition Language (DDL):
    - What it does: Defines and manages the structure of the database.
    - Common commands: Create (make something new), Drop (get rid of something), Alter (change something), Truncate (remove all data from a table).
    - Who uses it: Database administrators, designers, and developers.
    - Example: Creating a new table, changing the datatype of a column.
2. Data Manipulation Language (DML):
    - What it does: Deals with the data within the database.
    - Types:
        - Procedural DML: Specifies how to get the data.
        - Declarative DML (Non-procedural): Specifies what data is needed without detailing how to get it.
    - Common commands: Insert (add new data), Update (modify existing data), Delete (remove data), Query (retrieve data).
    - Who uses it: Application developers and end-users.
    - Example: Adding a new record, updating a customer’s information.
3. Data Control Language (DCL):
    - What it does: Controls access to data and the database.
    - Common commands: Commit (save changes), Rollback (undo changes).
    - Who uses it: Database administrators.
    - Example: Confirming and saving changes, canceling and reverting changes.
4. Data Query Language (DQL):
    - What it does: Retrieves and organizes data from the database.
    - Common commands: Select (retrieve data).
    - Who uses it: Application developers and end-users.
    - Example: Fetching a list of products from a database.
5. View Definition Language (VDL):

- What it does: Specifies user views and their mapping to the conceptual schema.
- Features: Creates virtual tables for users, defines what records are available to different user classes, specifies user interfaces.
- Example: Defining a view that shows only specific columns of a table.

Now, as for SQL, it is primarily a Data Manipulation Language (DML). It is used for querying, updating, and managing data within the database. So, when you write SQL queries, you are using a language that falls under the category of DML.

## Related posts:

1. What is database management system (DBMS) ? What are the tasks performed by users in DBMS ?
2. What are the advantages and disadvantages of DBMS ?
3. What do you understand by database users ? Describe the different types of database users.
4. Who are data administrators ? What are the functions of database administrator ?OR Discuss the role of database adinistrator.
5. What is data abstraction ? Explain different levels ofabstraction.
6. Explain the differences between physical level,conceptual level and view level of data abstraction.
7. Explain the difference between database management system (DBMS) and file system.
8. Discuss the architecture of DBMS. What are the types of DBMS architecture ?
9. What are data models ? Briefly explain different types of data models.
10. Describe data schema and instances.
11. Describe data independence with its types
12. Explain DBMS interfaces. What are the various DBMS interfaces ?
13. What is ER model ? What are the elements of ER model ? What are the notations of ER

diagram ?

14. What do you understand by attributes and domain ?Explain various types of attributes used in conceptual data model.
15. Construct an ER diagram for University system.
16. Construct an ER diagram for the registrar’s office
17. Explain the primary key, super key, foreign key and candidate key with example. OR Define key. Explain various types of keys.
18. What do you mean by a key to the relation ? Explain the differences between super key, candidate key and primary key.
19. Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.
20. What is Unified Modeling Language ? Explain different types of UML.
21. What is relational model ? Explain with example.
22. Explain constraints and its types.
23. Consider the following relations:
24. What are the additional operations in relational algebra ?
25. Explain integrity constraints.
26. Explain the following constraints : i. Entity integrity constraint. ii. Referential integrity constraint. iii. Domain constraint.
27. Describe mapping constraints with its types.
28. Explain how a database is modified in SQL. OR Explain database modification.
29. Discuss join and types with suitable example. Define join. Explain different types of join.
30. Describe the SQL set operations