1. **What is SQL? What is DML? What is DDL? Recite the most important SQL commands.**

SQL (Structured Query Language) is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS).

Originally based upon relational algebra and tuple relational calculus, SQL consists of a data definition language and a data manipulation language. The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language (4GL), it also includes procedural elements.

SQL was one of the first commercial languages for Edgar F. Codd's relational model, as described in his influential 1970 paper, "A Relational Model of Data for Large Shared Data Banks." Despite not entirely adhering to the relational model as described by Codd, it became the most widely used database language.

SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization (ISO) in 1987. Since then, the standard has been enhanced several times with added features. Despite these standards, code is not completely portable among different database systems, which can lead to vendor lock-in. The different makers do not perfectly adhere to the standard, for instance by adding extensions, and the standard itself is sometimes ambiguous.

Data Definition Language (DDL) statements are used to define the database structure or schema. Some examples:

* CREATE - to create objects in the database
* ALTER - alters the structure of the database
* DROP - delete objects from the database
* TRUNCATE - remove all records from a table, including all spaces allocated for the records are removed
* COMMENT - add comments to the data dictionary
* RENAME - rename an object

Data Manipulation Language (DML) statements are used for managing data within schema objects. Some examples:

* SELECT - retrieve data from the a database
* INSERT - insert data into a table
* UPDATE - updates existing data within a table
* DELETE - deletes all records from a table, the space for the records remain
* MERGE - UPSERT operation (insert or update)
* CALL - call a PL/SQL or Java subprogram
* EXPLAIN PLAN - explain access path to data
* LOCK TABLE - control concurrency

You can see the most commonly used commands in SQL here: http://www.udemy.com/blog/sql-queries/

1. **What is Transact-SQL (T-SQL)?**

Transact-SQL (T-SQL) is Microsoft's and Sybase's proprietary extension to SQL. SQL, the acronym for Structured Query Language, is a standardized computer language that was originally developed by IBM for querying, altering and defining relational databases, using declarative statements. T-SQL expands on the SQL standard to include procedural programming, local variables, various support functions for string processing, date processing, mathematics, etc. and changes to the DELETE and UPDATE statements. These additional features make Transact-SQL Turing complete.

Transact-SQL is central to using Microsoft SQL Server. All applications that communicate with an instance of SQL Server do so by sending Transact-SQL statements to the server, regardless of the user interface of the application.

Keywords for flow control in Transact-SQL include BEGIN and END, BREAK, CONTINUE, GOTO, IF and ELSE, RETURN, WAITFOR, and WHILE. IF and ELSE allow conditional execution.