# Homework: SQL Introduction

## 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), or for stream processing in a relational data stream management system (RDSMS).

**DML** - A data manipulation language (DML) is a family of syntax elements similar to a computer programming language used for selecting, inserting, deleting and updating data in a database. Performing read-only queries of data is sometimes also considered a component of DML.

**DDL** - Data Definition Language (DDL) is a standard for commands that define the different structures in a database. DDL statements create, modify, and remove database objects such as tables, indexes, and users. Common DDL statements are CREATE, ALTER, and DROP.

**Most Important SQL Commands –**

SELECT - extracts data from a database.

UPDATE - updates data in a database.

DELETE - deletes data from a database.

INSERT INTO - inserts new data into a database.

CREATE DATABASE - creates a new database.

ALTER DATABASE - modifies a database.

CREATE TABLE - creates a new table.

## What is Transact-SQL (T-SQL)?

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.

Transact-SQL provides the following statements to declare and set local variables: DECLARE, SET and SELECT.

DECLARE @var1 NVARCHAR(30)

SET @var1 = 'Some Name'

SELECT @var1 = Name

FROM Sales.Store

WHERE CustomerID = 1000