**Data definition language**

Data Definition Language (DDL) is a vocabulary used to define data structures in SQL Server 2016. Use these statements to create, alter, or drop data structures in an instance of SQL Server.

**Domain type in SQL**

har(n) (or character(n)): fixed-length character string, with user-specified length.

varchar(n) (or character varying): variable-length character string, with user-specified maximum length.

int or integer: an integer (length is machine-dependent).

smallint: a small integer (length is machine-dependent).

numeric(*p, d*): a fixed-point number with user-specified precision, consists of *p* digits (plus a sign) and *d* of *p* digits are to the right of the decimal point. E.g., numeric(*3, 1*) allows 44.5 to be stored exactly but not 444.5.

real or double precision: floating-point or double-precision floating-point numbers, with machine-dependent precision.

float(n): floating-point, with user-specified precision of at least *n* digits.

date: a calendar date, containing four digit year, month, and day of the month.

**Schema definition in SQL**

SQL-Schema Statements provide maintenance of catalog objects for a schema -- tables, views and privileges. This subset of SQL is also called the Data Definition Language for SQL. There are 6 SQL-Schema Statements:

**CREATE TABLE Statement**

The CREATE TABLE Statement creates a new base table. It adds the table description to the catalog. A base table is a logical entity with persistence. The logical description of a base table consists of:

* Schema -- the logical database *schema* the table resides in
* Table Name -- a name unique among tables and views in the Schema
* Column List -- an ordered list of column declarations (name, data type)
* Constraints -- a list of constraints on the contents of the table

The CREATE TABLE Statement has the following general format:

CREATE TABLE table-name ({column-descr|constraint} [,{column-descr|constraint}]...)

*table-name* is the new name for the table. *column-descr* is a column declaration. *constraint* is a *table* constraint.

**CREATE VIEW Statement**

The CREATE VIEW statement creates a new database view. A view is effectively a SQL query stored in the catalog. The CREATE VIEW has the following general format:

CREATE VIEW view-name [ ( column-list ) ] AS query-1[WITH [CASCADED|LOCAL] CHECK OPTION ]

*view-name* is the name for the new view. *column-list* is an optional list of names for the columns of the view, comma separated. *query-1* is any SELECT statement without an ORDER BY clause. The optional WITH CHECK OPTION clause is a constraint on *updatable* views.

*column-list* must have the same number of columns as the select list in *query-1*. If *column-list* is omitted, all items in the select list of *query-1* must be named.

**DROP TABLE Statement**

The DROP TABLE Statement removes a previously created table and its description from the catalog. It has the following general format:

DROP TABLE table-name {CASCADE|RESTRICT}

*table-name* is the name of an existing base table in the current schema. The CASCADE and RESTRICT specifiers define the disposition of other objects dependent on the table.