```sql
--Creating a database that we can use for this tutorial.
CREATE DATABASE MsSqlServer_Tutorial;

--Changing the directory to the newly created database.
USE MsSqlServer_Tutorial;

/* DDL: Data definition language is used to define the schema of the table in the database.
In other words, DDL commands are used to control the structure of the database.*/

/* There are 4 majorly used DDL commands in SQL:
    1) CREATE
    2) DROP
    3) ALTER
    4) TRUNCATE */

--The CREATE STATEMENT:
CREATE TABLE Sample_Table
(Sno INT,
Sname VARCHAR(20),
Marks INT);
--Syntax: CREATE TABLE table_name(column_name datatype constraint). This will create a table.

SELECT * FROM Sample_Table;

--ALTER Command:
ALTER TABLE Sample_Table
ADD Class INT;

ALTER TABLE Sample_Table
ALTER COLUMN Class VARCHAR(2); --Changing datatype of column

/* Syntax: ALTER TABLE Table_name
           ADD column_name datatype constraint; Used to add a column

           ALTER TABLE Table_name
           DROP COLUMN column_name; Used to drop a column.

           ALTER TABLE Table_name
           ALTER COLUMN column_name new_datatype; Used to Change Column datatype.


           ALTER TABLE Table_name
           RENAME COLUMN old_name TO new_name; Used only in MYSQL*/

/* Alter command is used to change the definition of the table. You can add, drop or rename
columns using the alter command after the table is created.*/

--Inserting data into the table

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```sql
/* The insert statement is an DML command. DML stand for Data Manupulation
  Language.
They are used to manage the records that are stored in the database.
More about DML commands in the next tutorial.*/

INSERT INTO Sample_Table (Sno,Sname, Marks,Class) VALUES (1,'John', 85,9),
(2,'Emma', 78,9),
(3,'Michael', 92,8),
(4,'Sophia', 67,8),
(5,'William', 88,10);

--Select is used to view the data in the table.
SELECT * FROM Sample_Table;

--Truncate Command:
TRUNCATE TABLE Sample_Table;

/* 1) The truncate command is used to remove all the data from the table without
  removing
the schema of the table.
2) The column names and datatypes also called  as table definition will remain.
But, all the data in the table will be earsed.
3) In most cases, the memory allocated for the table will also be deallocated.*/

SELECT * FROM Sample_Table;

--Drop Command:
DROP TABLE Sample_Table;

/* 1) Drop is used to delete the entire database or table along with the data.
2) Drop will delete the data completely from the database.*/

--Creating the table again since we dropped the table.
--The CREATE STATEMENT:
CREATE TABLE Sample_Table
(Sno INT,
Sname VARCHAR(20),
Marks INT,
Class INT);

/* DML Commands: DML stands for Data Manipulation Language. It is used to
  interact and
manipulate the data in the database.
The DML commands are as follows:
    1) INSERT
    2) UPDATE
    3) DELETE
    These DML commands are essential for maintaining and managing the data in a
      database. */

SELECT * FROM Sample_Table;
-- INSERT COMMAND
```

```sql
--The INSERT command is used to add new rows or records into a table.
INSERT INTO Sample_Table
VALUES (1,'Vinay',89,8); --Inserting single value into the table.

--Inserting multuple values into the table.
/* SYNTAX: INSERT INTO table_name VALUES (Insert values in the same order as
  colnames in the table)*/

INSERT INTO Sample_Table
VALUES (2,'Maharshi',78,9),
(3,'Kishore',98,8),
(4,'Biyani',77,9),
(5,'Maharshi',52,8);

/*There is another way of inserting if you want to insert data into the table in
  a specific
order. Let us say I want to enter the class first, then name, marks and finally
  SNo.*/

INSERT INTO Sample_Table (Class,Sname,Marks,Sno)
VALUES (6,'Khan',65,6);

--You can mention the order in which you want to insert in brackets after the
  table name.

SELECT * FROM Sample_Table; -- To View the inserted data.

--Update Command
/* The UPDATE command is used to modify existing records in a table.
It allows you to change the values of one or more columns based on
specified conditions using the WHERE clause.*/

/* SYNTAX: UPDATE table_name
SET column1 = value1, column2 = value2, ...
WHERE condition; */

UPDATE Sample_Table
SET Sname = 'John'
WHERE Sno = 5; --This will update Maharshi to John where Sno is 5.

SELECT * FROM Sample_Table;

--The Delete command:
/*The DELETE statement is used to remove rows or records from a table based
on specified conditions.*/

/* SYNTAX: DELETE FROM table_name
WHERE condition;*/

DELETE FROM Sample_Table
WHERE Sno = 5; --This will remove the data from the table where Sno is 5.

```

```
145 /* You can also delete based on various other conditions like <=,>=,>,<
146 based on you requirement. Let us delete all the rows that have marks >= 85.*/
147
148 DELETE FROM Sample_Table
149 WHERE Marks >= 85; --This will delete two rows from the table that have values
      greater than 85
150
151 SELECT * FROM Sample_Table; -- To view the final data in the table after all the
      changes have been made.
```