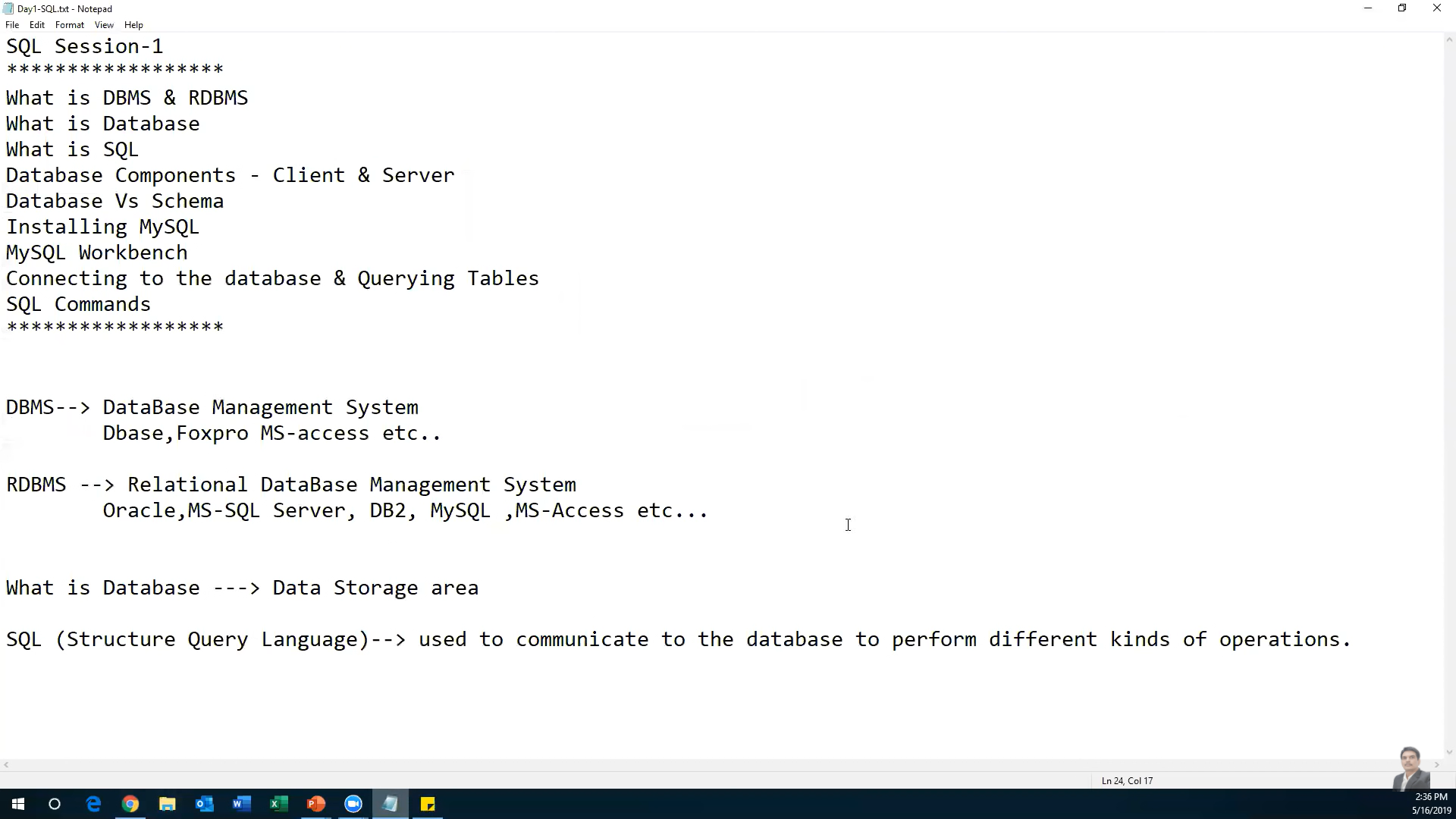
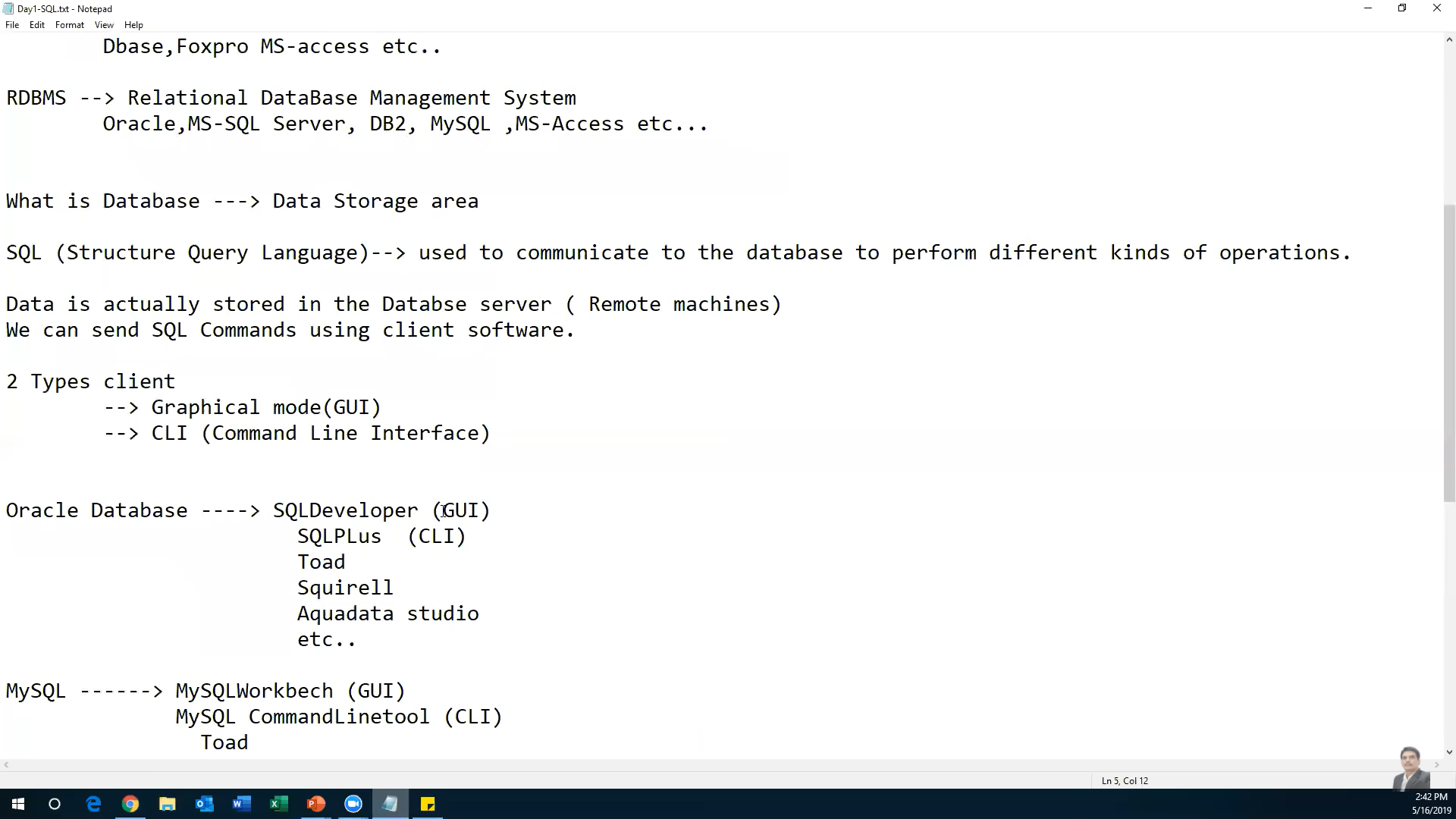
**SQLTutorial**

**PlayList Link:** [**https://www.youtube.com/playlist?list=PLUDwpEzHYYLvWEwDxZViN1shP-pGyZdtT**](https://www.youtube.com/playlist?list=PLUDwpEzHYYLvWEwDxZViN1shP-pGyZdtT)

**Tutorial 1: Overview on Database, DBMS/RDBMS, SQL | Database Components**





**Tutorial 2: Installing MySQL, Working with SQL Workbench & Command Line Clients**

To download MySQL software

<https://dev.mysql.com/downloads/windows/installer/8.0.html>

**CLI commnads**

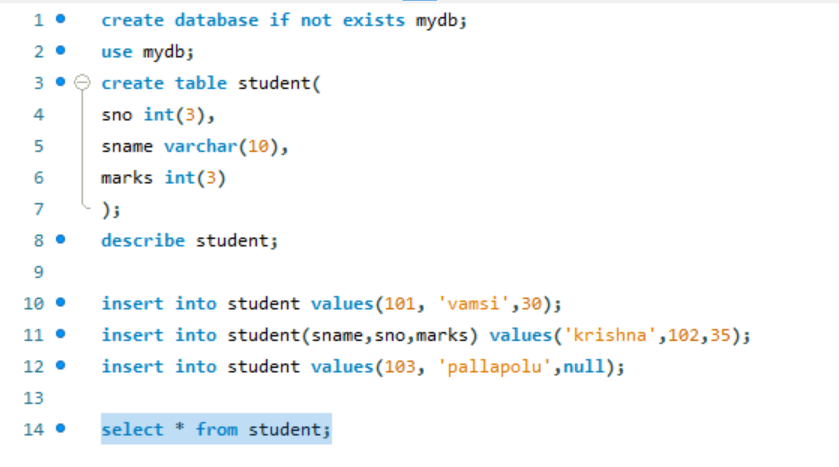
Show databases;

use <table-name>;

select \* from <table-name>;

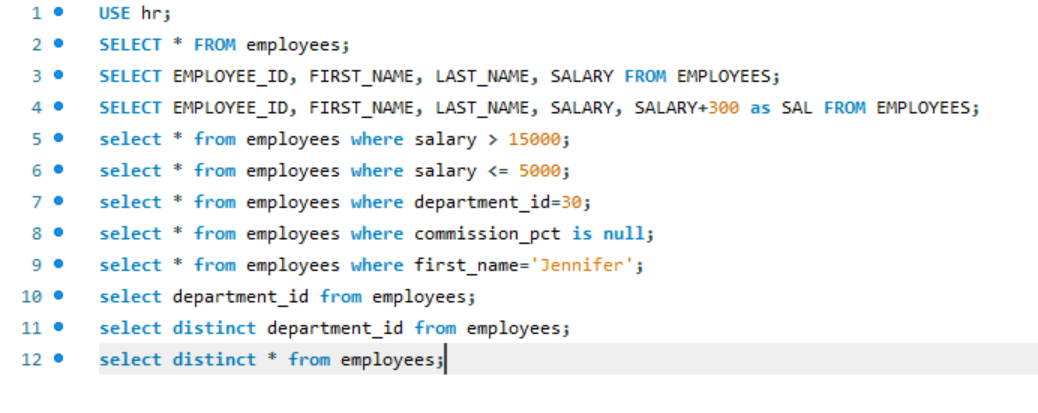
**Tutorial 3: Create Database,Table, Inserting Records and Retrieving Data**

Describe command gives the structure of the table

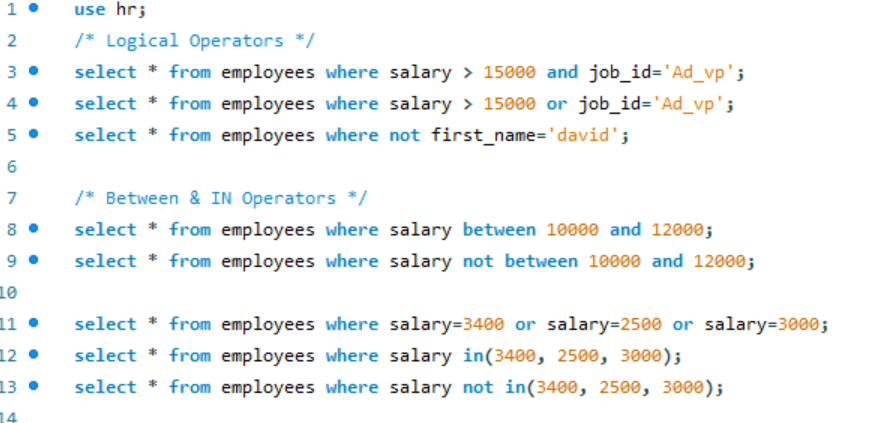


**Tutorial 4: Filtering Rows(Where Clause), Operators & Pattern Matching**

**Where clause**



**Logical Operators**



**Wild Card Operators**



**Tutorial 5: DDL (Data Definition Language) Commands**

**DDL Commands**

* create
* alter
  + add column
  + drop column
  + modify column
  + rename column <old-col-name> to <new-col-name>
* drop
* truncate
* rename

If we want to reduce the size of the column, no data should be present in the column

Drop

To drop all the data bases object (both table defination and data will be deleted)

Truncate

Table struture will be present but data will be deleted

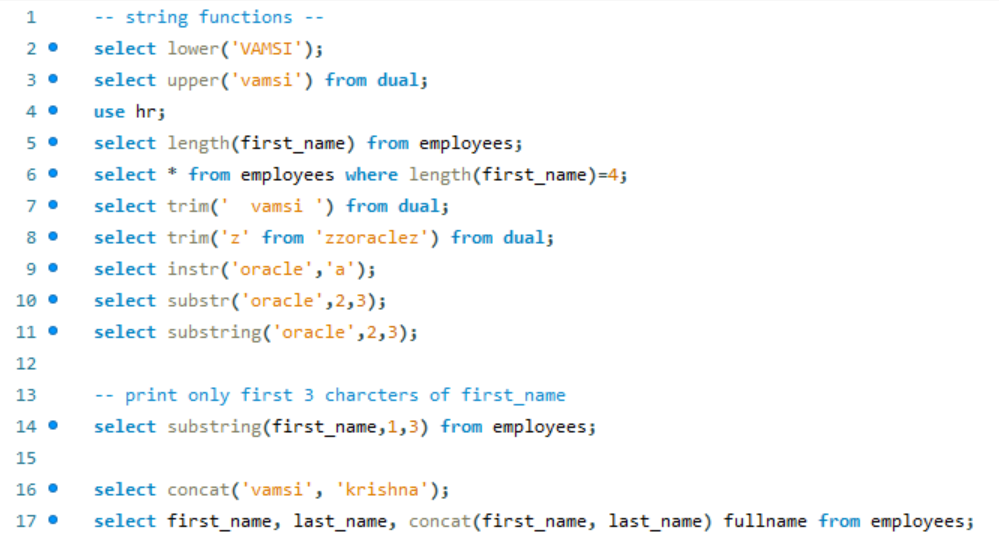
Data will be deleted permanently, we cannot roll back the data

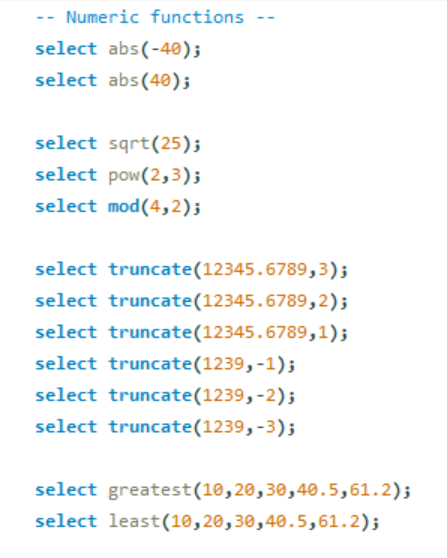
Delete

Table struture will be present

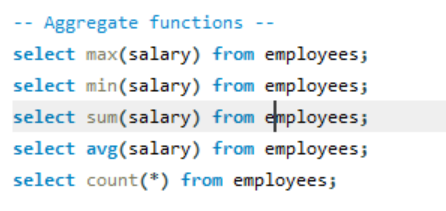
Data will be deleted but we can roll back the data

**Tutorial 6: MySQL Built-in Functions in SQL**









**Tutorial 7: Group By, Having & ,Order By Clauses in SQL**



**Tutorial 8: Union & Union All in SQL**

Set operators

* Union
* Union All
* Intersect
* Minus

To retrieve the data from multiple tables we can use:

* Set operators
* Joins
* Sub queries

UNION

* It retrieve the data from both the tables but it eliminate the duplictes

UNION ALL

* It retrieve the data from both the tables but it does not eliminate the duplictes

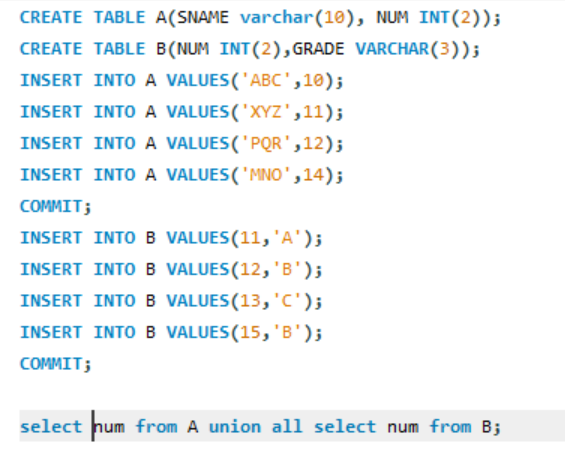
INTERSECT

* It retrieve the common data among the tables

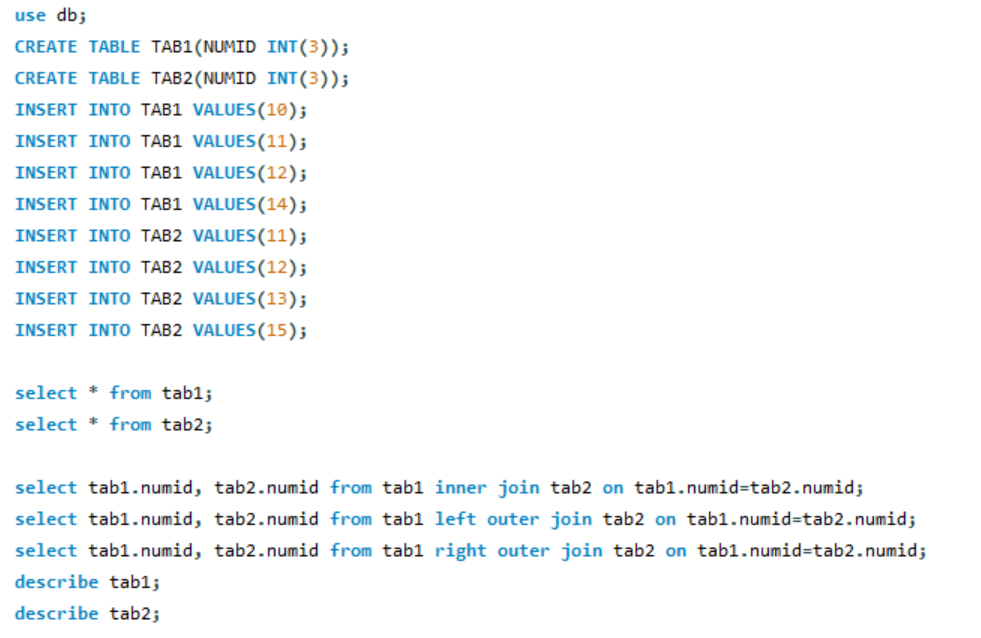
MINUS

* T1 – T2
* It retrieves the data which is present in T1 but not T2

MySQL doesn’t support intersect and minus operators

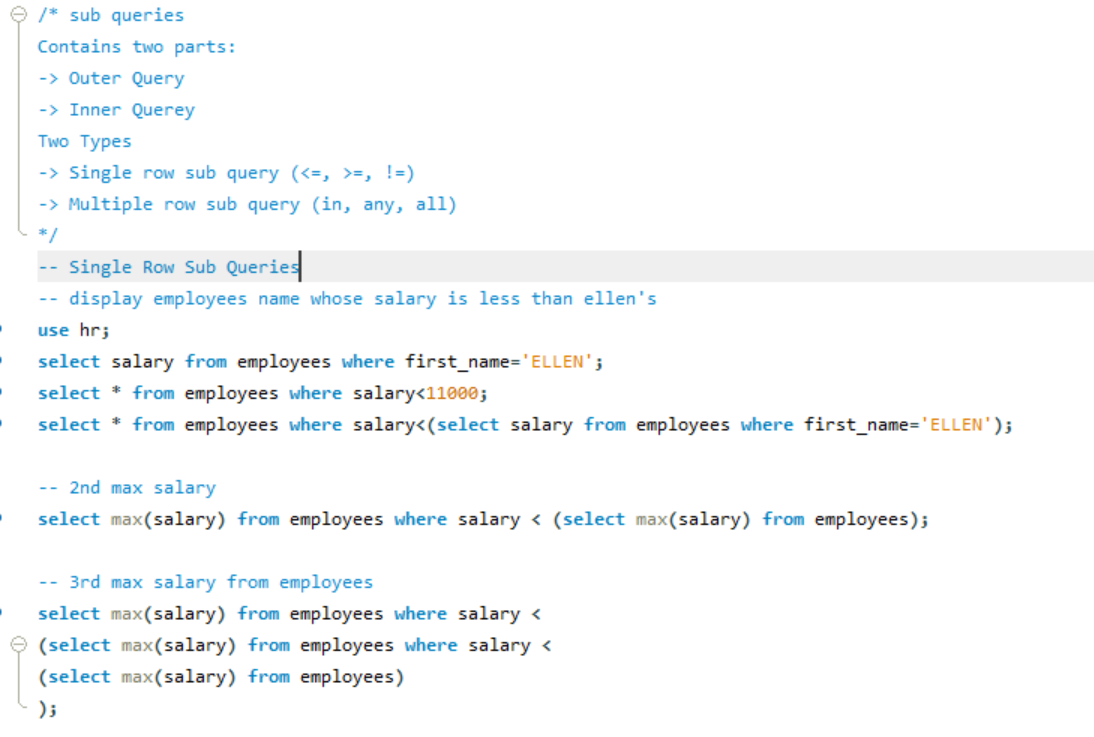


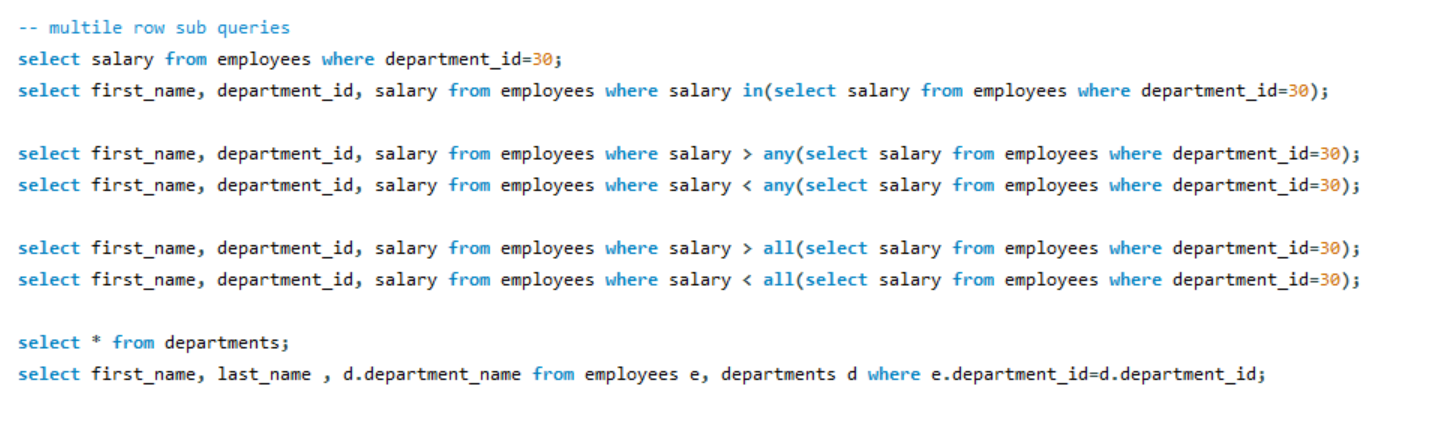
**Tutorial 9: SQL Joins and Sub Queries**

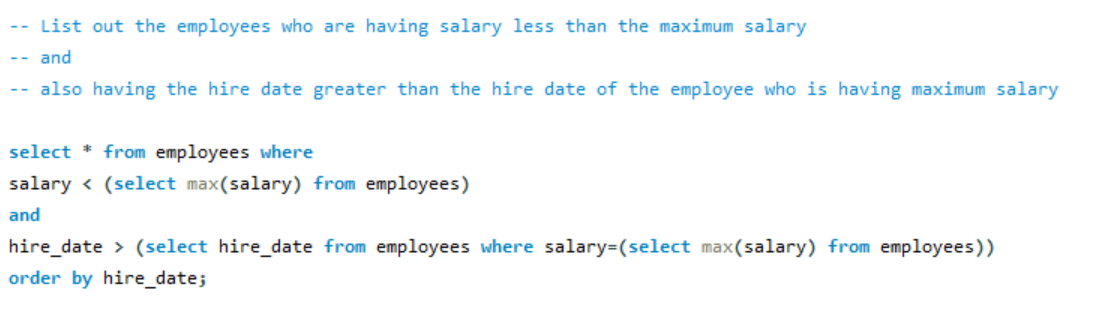


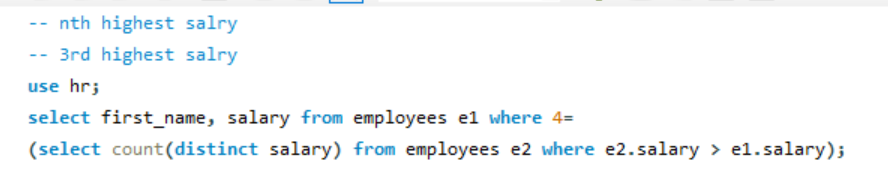


Sub Queries









**Tutorial 10: Integrity Constraints**

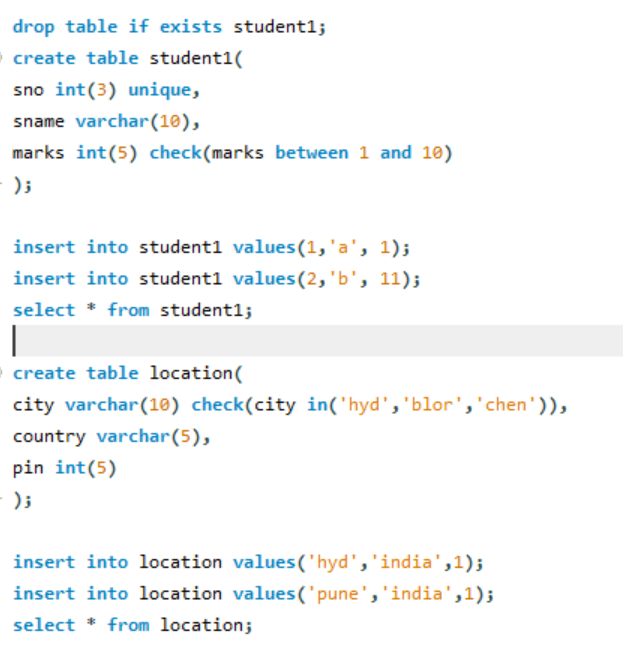
Primary key can be applied only any single column for a table

Composite primary key can be applied on multiple columns at table level only

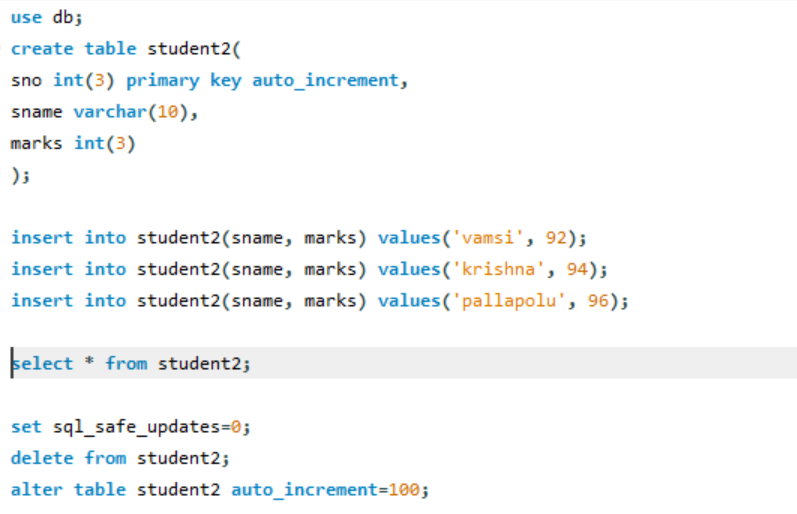
When you insert a record into a child table, first it will verify in parent table wheather record is present or not

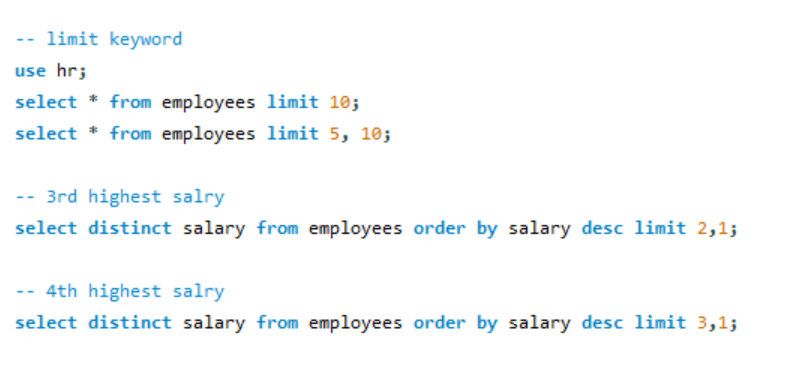
If you try to delete a record from parent record directly without deleteing records from child table , it’s not allowed



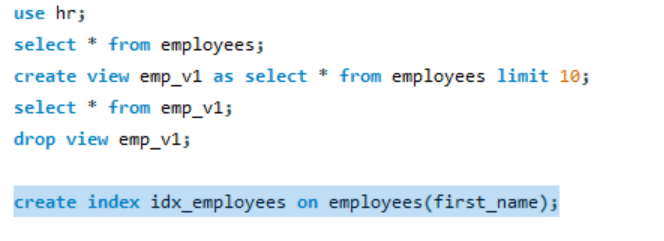


**Tutorial 11: Auto Increment & Limit**

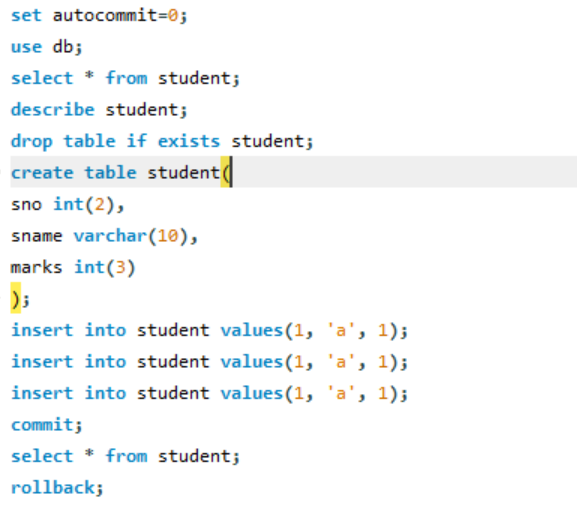




**Tutorial 12: SQL Views & Index**



**Tutorial 13: TCL Commands | Commit | Rollback**



**Tutorial 14: JDBC | Java Database Connectivity with MySQL**

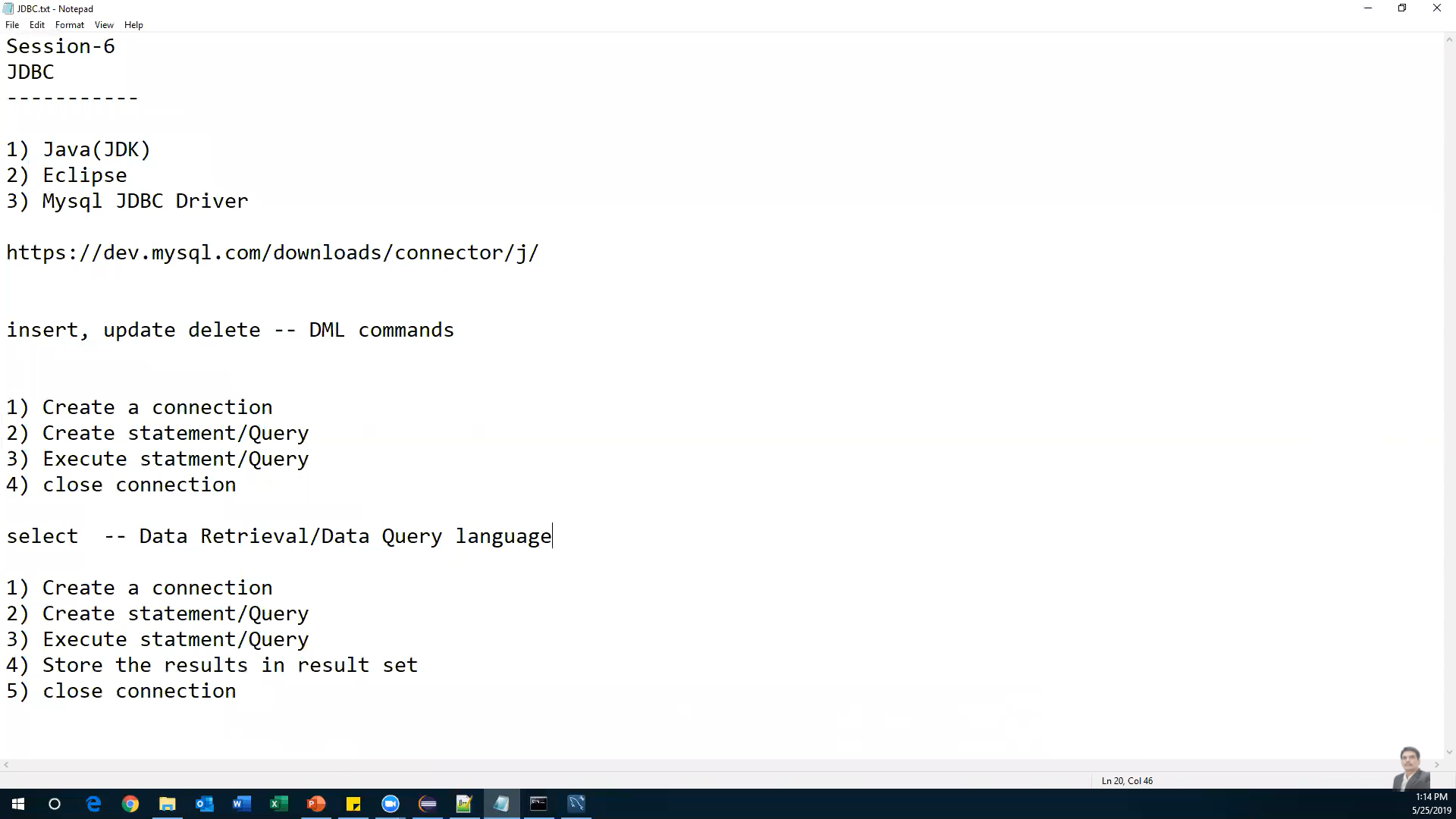
Create a connection

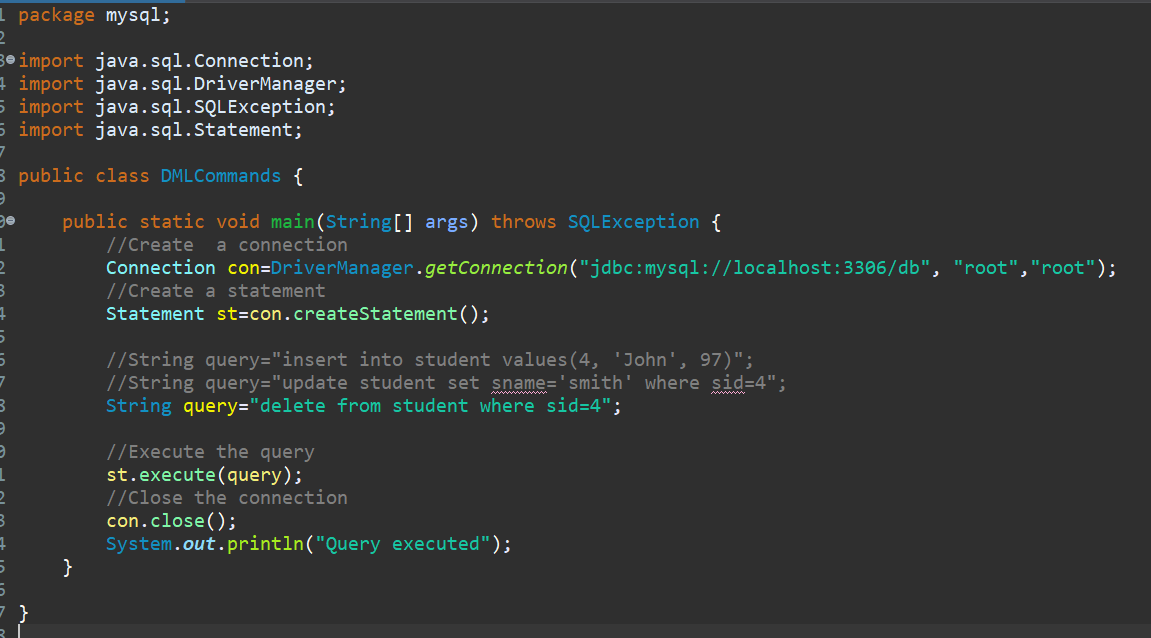
Create a statement Query

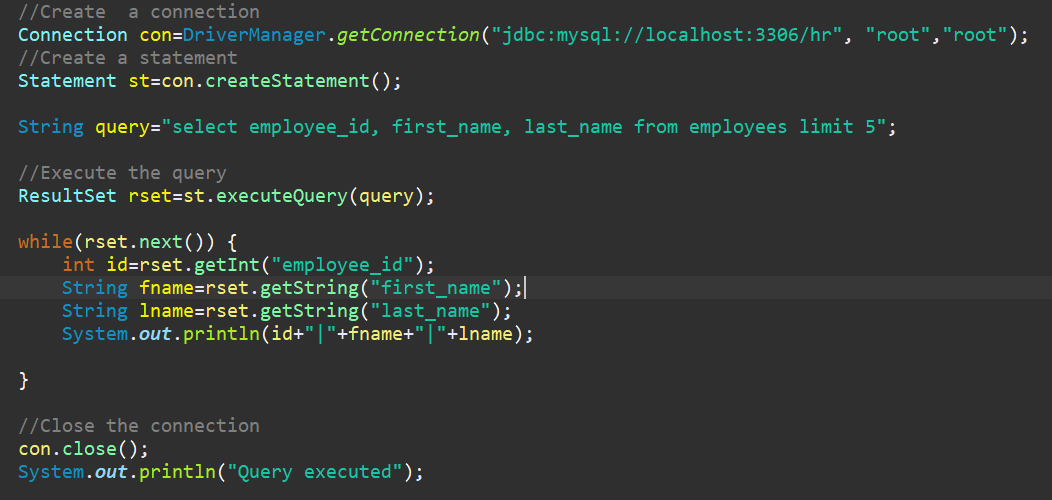
Execute the statement

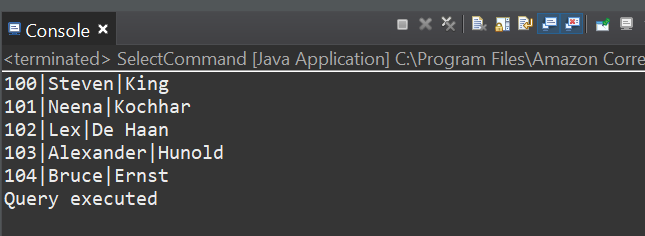
Store the results in result set

Close the connection





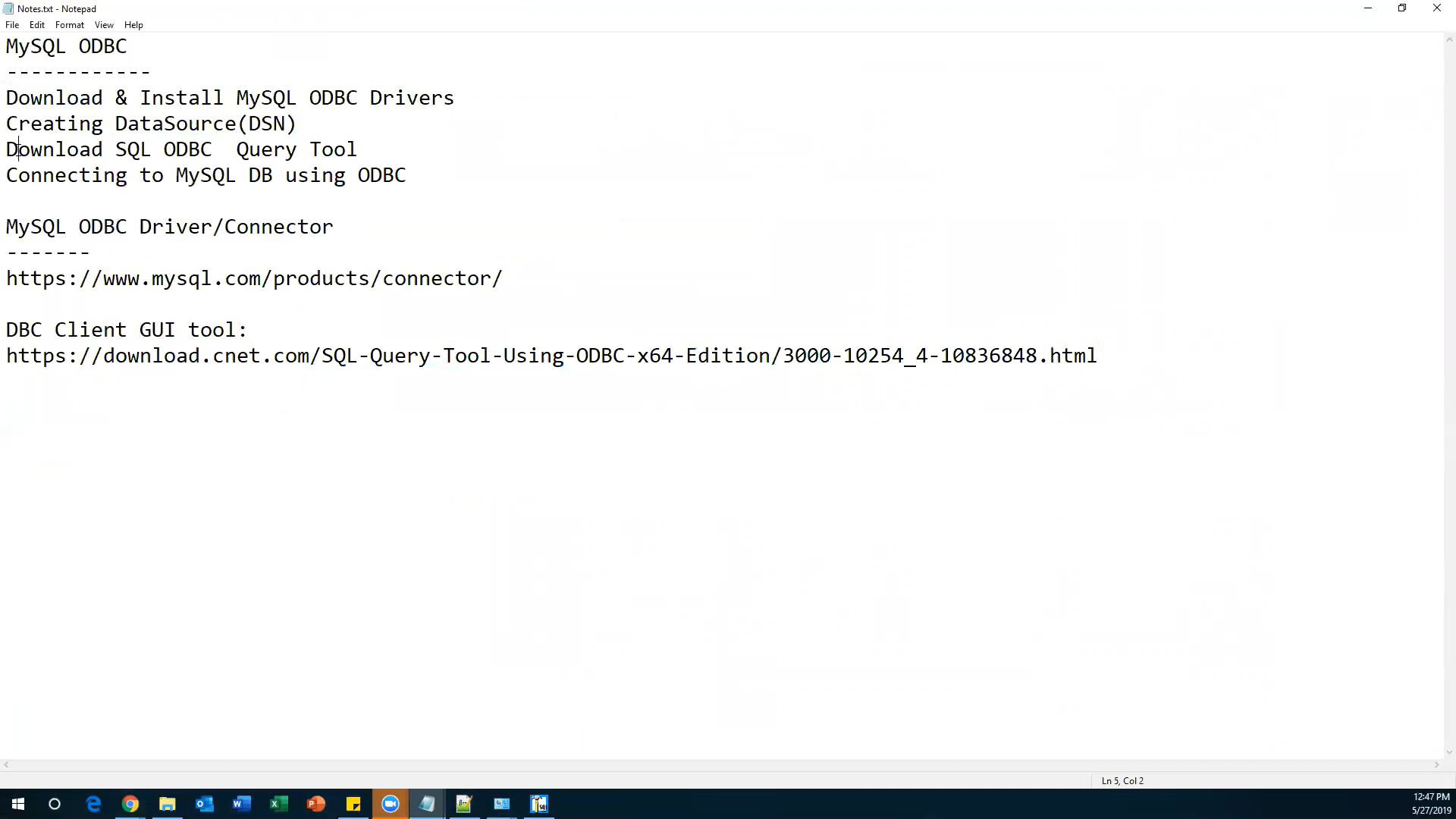




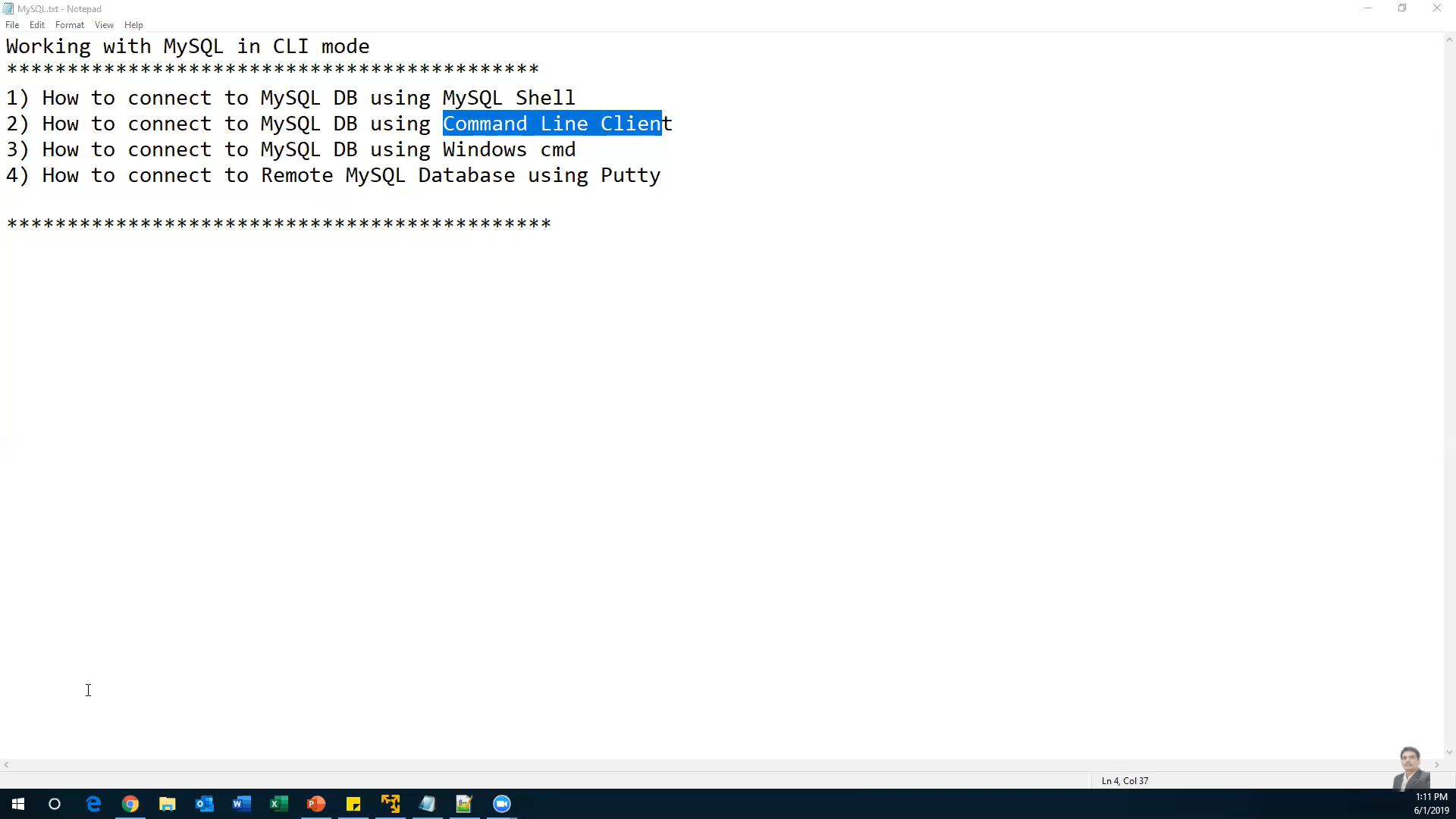
**Tutorial 15: ODBC | Open Database Connectivity with MySQL**

Client Tool

<https://download.cnet.com/SQL-Query-Tool-Using-ODBC-x64-Edition/3000-10254_4-10836848.html>



**Tutorial 16: MySQL Command Line Tools/Clients | Connecting to Remote MySQL Database Server**



MySQL Shell commands link:

<https://dev.mysql.com/doc/mysql-shell/8.0/en/mysql-shell-commands.html>

MySQL Shell Commands

* \sql
* \connect root@localhost:3306/db

To connect to my sql database using cmd:

Open cmd

cd C:\Program Files\MySQL\MySQL Server 8.0\bin

* mysql -u root -p