*Apurva Mithal*

*axm174531*

**READ ME**

* System Requirements:
  + Operating System – Windows 10
* JAVA Version: 1.7.0\_80
* Software: Eclipse

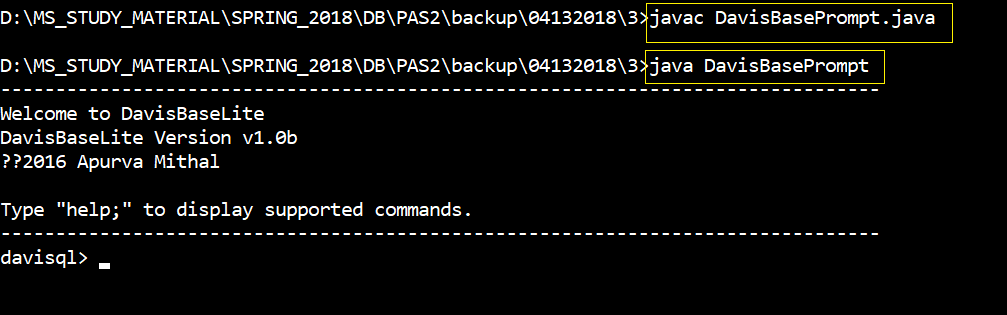
**NOTE:**

* Implemented **optional bonus features**
  + Delete from table
  + Creating Index

**HOW TO RUN**

* Download the zip from eLearning and extract the files in your local drive. (say D:\DB\_PAS2 \)
* Open the command prompt.
* Change the directory to the path where java files are extracted –( D:\DB\_PAS2 \)
* Main file is DavisBasePrompt.java

***Compile and Run:***

* Compile the code by the following command ->
  + *javac DavisBasePrompt.java*
* Run the file by command ->
  + *java DavisBasePrompt*
* 

**GET STARTED:**

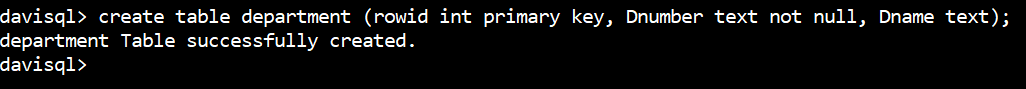
***CREATE TABLE:***

***Syntax***

*CREATE TABLE <table\_name> (rowid int primary key, <column2 datatype2 not null>,....<columnk datatypek>*

***Example***

create table department (rowid int primary key, Dnumber text not null, Dname text);



**INSERT INTO**

***Syntax***

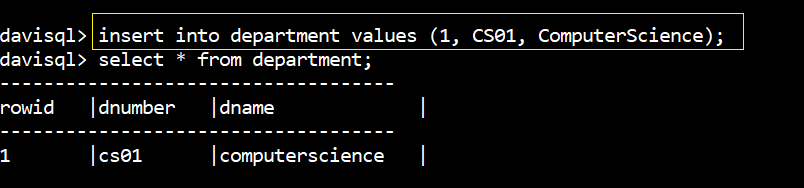
INSERT INTO <table\_name> (column\_list) VALUES (value1,value2,value3, ...);

INSERT INTO <table\_name> VALUES (value1,value2,value3, ...);

***Example***

insert into department (rowid, Dnumber, Dname) values (1, CS01, ComputerScience);

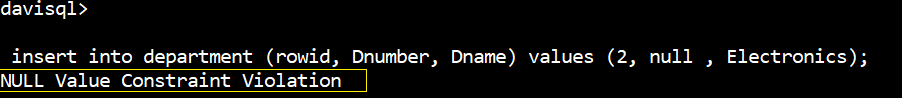
insert into department values (1, CS01, ComputerScience);

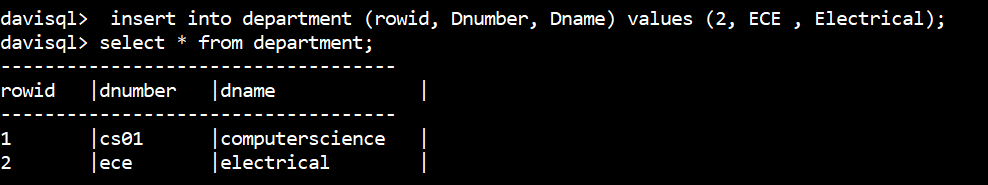


**Unique Constraint**:



**Null Value Constraint**





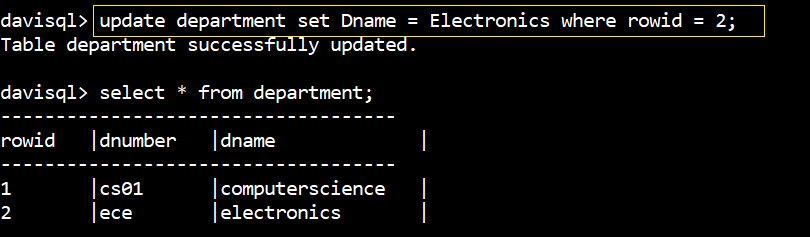
**UPDATE TABLE**

***Syntax***

*UPDATE <table\_name> SET <column\_name> = <value> [WHERE <condition>]*

***Example***

update department set Dname = Electronics where rowid = 2;



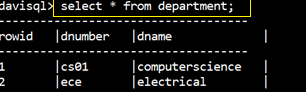
**SELECT**

***Syntax***

SELECT <column\_list> FROM <table\_name> ;

***Example***

select \* from department;



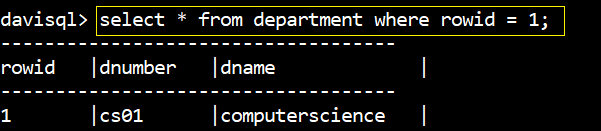
**SELECT <Where>**

***Syntax***

SELECT <column\_list> FROM <table\_name> [WHERE <condition>];

***Example***

select \* from department where rowid = 1;



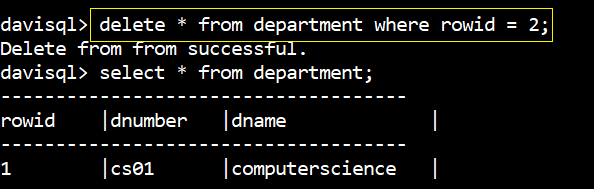
**DELETE (BONUS FEATURE)**

***Syntax***

DELETE FROM <table\_name> where <condition>;

***Example***

delete \* from department where rowid = 2;



**QUERYING FRON METADATA TABLES**

* **DAVISBASE\_TABLES**

**SHOW TABLES;**

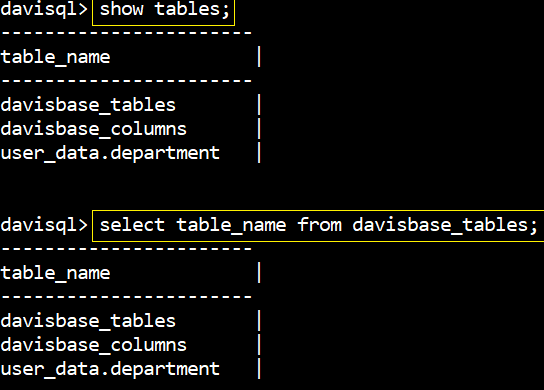
***Syntax***

SHOW TABLES;

***Example***

show tables;

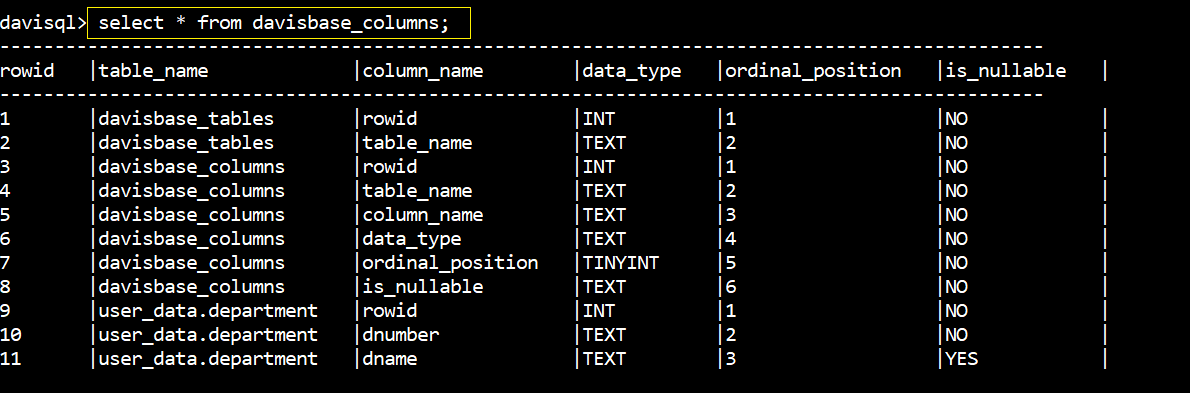
select table\_name from davisbase\_tables;



* **DAVISBASE\_COLUMNS**

***Example***

select \* from davisbase\_columns;



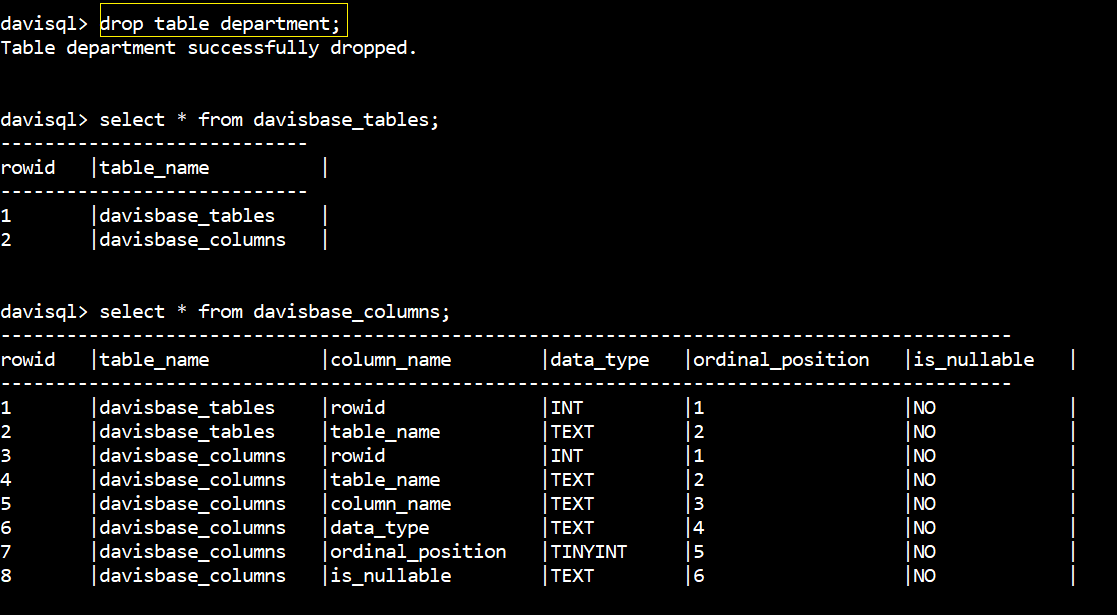
**DROP TABLE**

***Syntax***

DROP TABLE <table\_name>;

***Example***

drop table department;



***BONUS FEATURES:***

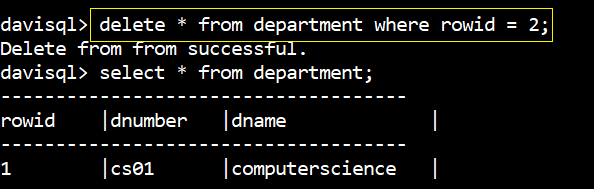
**DELETE (BONUS FEATURE)**

***Syntax***

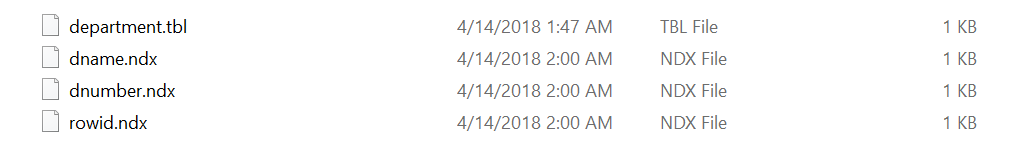
DELETE FROM <table\_name> where <condition>;

***Example***

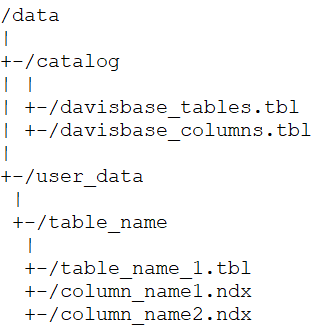
delete \* from department where rowid = 2;



**INDEXING (BONUS FEATURE)**



***Directory Structure formed***

**