Database Technologies lab Homework2B

1. Create table number\_data\_types(

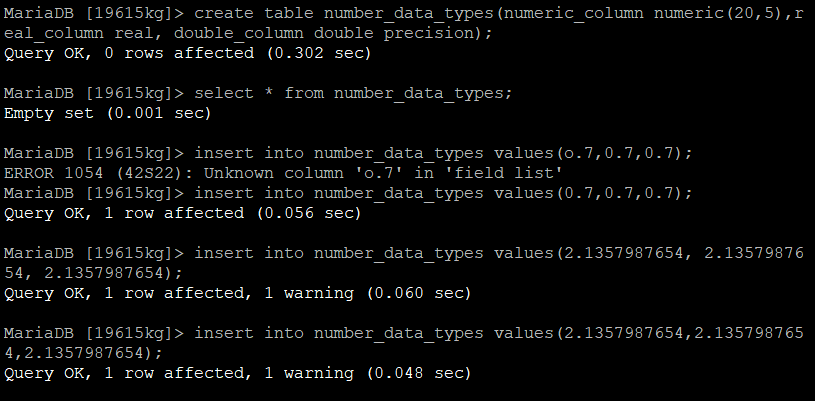
Numeric\_column numeric(20,5),

Real\_column real,

Double\_column double precision);

1. Insert into number\_data\_types values(0.7, 0.7, 0.7);
2. Insert into number\_data\_types values(2.1357987654,

2.1357987654, 2,1357987654);



Explanation about SQL Queries =>

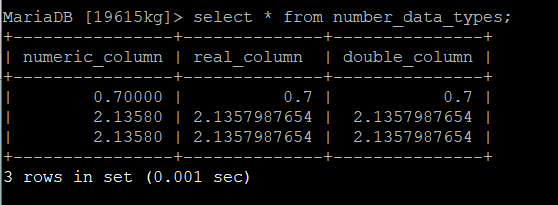
=>Basically here we are creating a empty table number\_data\_types with columns and datatypes

Syntax=> create table XYZ(col1 datatype, col2 datatype, col3 datatype);

=>This is where we put datavalues in the table

=> insert into table values(value1, value2, value3);

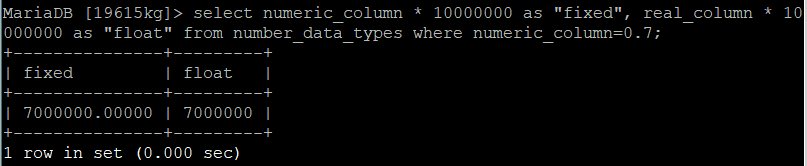
1. Select \* from number\_data\_types;



=>This is where we can display values from table number\_data\_types

* Select \* from table

1. Select numeric\_column \* 10000000 as “fixed”, real\_column \*10000000 as “float” from number\_data\_types where numeric\_column=0.7;



=>This is where we select numeric\_column value, multiply with 10000000 and store in alias column name with “fixed”. Similary , select real\_column value, multiply with 10000000 and store in alias column name with “float” display in tabular form

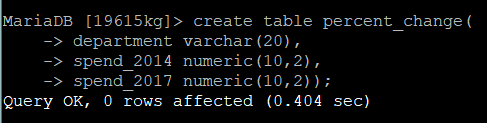
=>select col1+ calculation as “alias1”, col2 + calculations as “alias2” from table where column= value;

1. Create table percent\_change(

department varchar(20),

spend\_2014 numeric (10,2),

spend\_2017 numeric(10,2));



=>This is where we create another table percent\_change with columns and datatypes.

=>create table tablename(col1 datatype, col2 datatype, col3 datatype)

7)insert into percent\_change values(‘Building’, 250000, 289000);

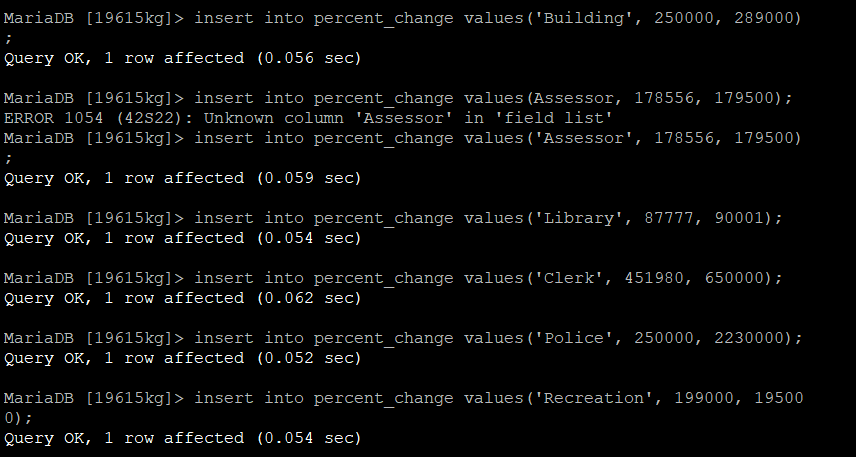
insert into percent\_change values(‘Accessor’, 178556, 179500);

insert into percent\_change values(‘Library’, 87777, 90001);

insert into percent\_change values(‘Clerk’, 451980, 650000);

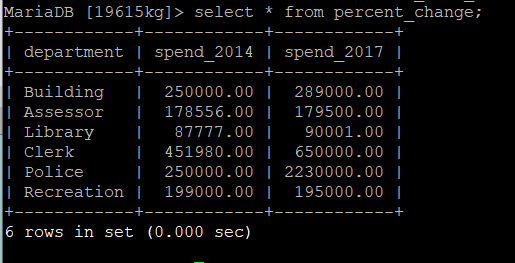
insert into percent\_change values(‘Police’, 250000, 223000);

insert into percent\_change values(‘Recreation’, 199000, 195000)



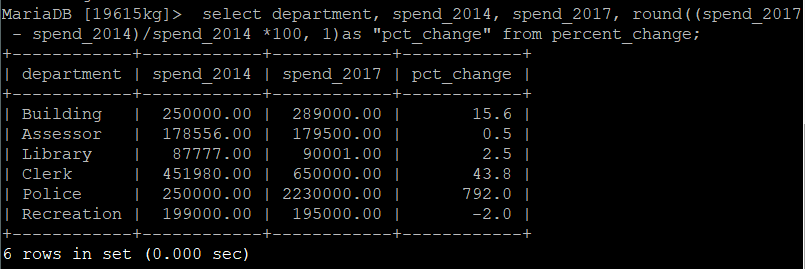
=>This is where we put values in table percent\_change

8)select \* from percent\_change;



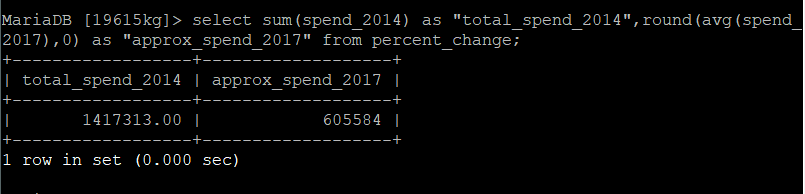
=>This is where we can display datavalues in tabular form

9)select department, spend\_2014, spend\_2014, spend\_2017, round(spend\_2017 – spend\_2014 \*100,1)as “pct\_change” from percent\_change;



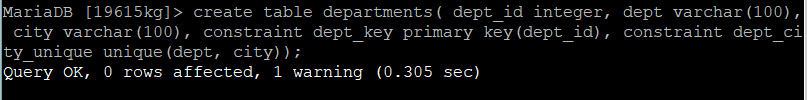
This is where we select department column, spend\_2014, spend\_2017 from table and do round figure of sum calculations and store in new column “pct\_change”

10)Select sum(spend\_2014) as “total\_spend\_2014”, round(avg(spend\_2017),0) as “approx.\_spend\_2017” from percent\_change;



=>This is where we select values from column spend\_2014, make a sum and store in new column “total\_spend\_2014”, also make average of values from spend\_2017 and store in new column “approx.\_spend\_2017” from table percent\_change and display in tabular form.

11)create table departments(dept\_id integer, dept varchar(100), city varchar(100), constraint dept\_key primary key(dept\_id), constraint dept\_city\_unique unique(dept, city));



=>This is where create new table named departments with columns and datatypes.

12)Create table employees(

emp\_id integer,

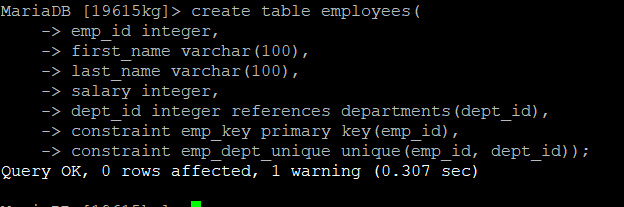
first\_name varchar(100),

last\_name varchar(100),

salary integer,

dept\_id integer references departments(dept\_id),

constraint emp\_dept\_unique unique(emp\_id, dept\_id));



=>This is where we create table employees with columns and datatypes including constaints to limit type of datavalues in the columns.

13)Insert into departments values(1, ‘Tax’, ‘Atlanta’);

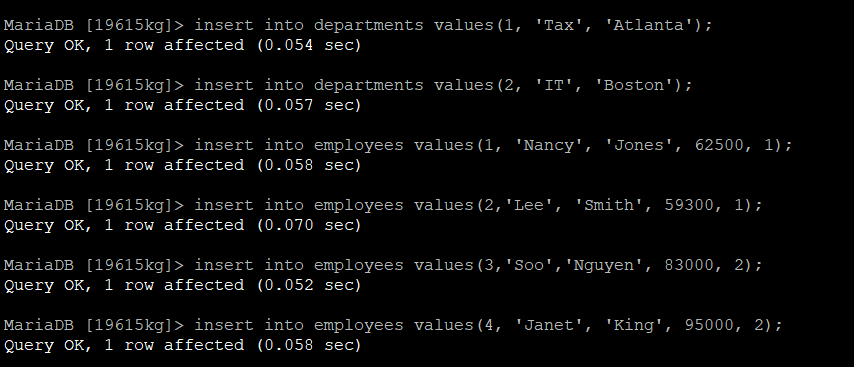
Insert into departments values(2, ‘IT’, ‘Boston’);

Insert into employees values(1, ‘Nancy’, ‘Jones’,62500, 1);

Insert into employees values(2, ‘Lee’, ‘Smith’,59300, 1);

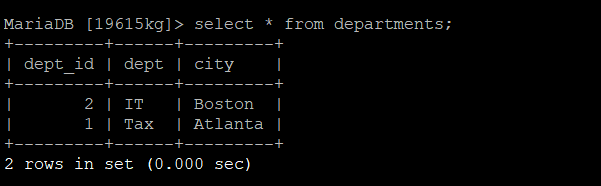
Insert into employees values(3, ‘Soo’, ‘Nguyen’, 83000, 2);

Insert into employees values(4, ‘Janet’, ‘King’, 95000, 2);



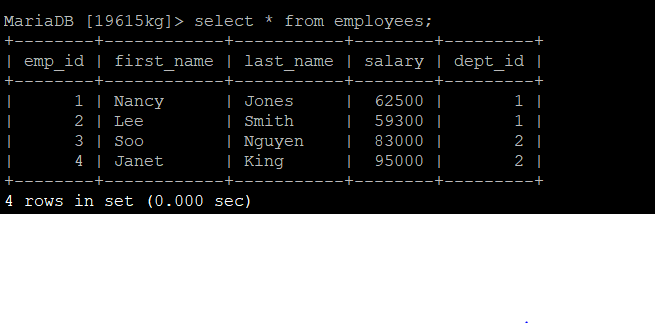
=>This is where we put values in table employees

14) Select \* from departments;



=>This is where we display values from table departments

15)select \* from employees;



=>This is where we display datavalues from table employees