PRACTICAL 3

Aim: Create a database using Data Definition Language (DDL) and apply integrity ~~constants~~ constraints for the specified system.

Theory: DDL Queries are used to:
a) To create structure of the database
b) To change or modify the structure
c) To delete a table from database
d) To change the name of a table
e) To delete rows of a table.

* Create Query

Syntax: create table <name>
(column1 , datatype (size),
column2 , datatype (size),
: :);

Example- for student_info (rollno, name, DOB, address, branch)
create table query would be.
create table student_info (rollno number (4),
name varchar (30),
DOB DATE,
address varchar (40),
branch varchar (4));

* Alter Query. - used to change the structure of an existing query / table.

Type - a) Alter add
b) Alter modify

- Alter add is used when we need to add a new column to an existing table. We can also add constraints.

① to add column: alter table <name>
add column name datatype(size);

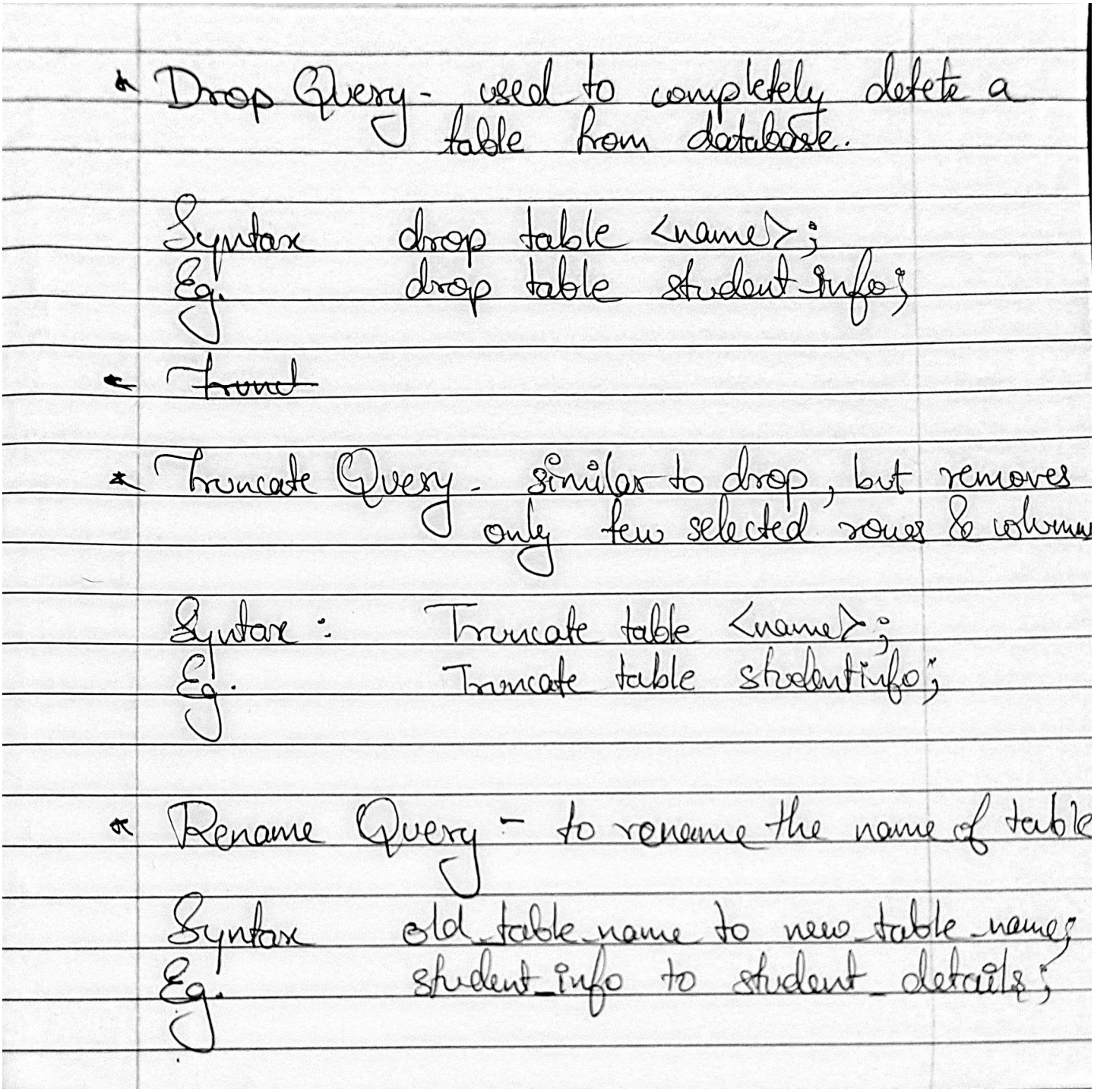
② to add constraint: alter table <name>
add constraint name type(column);

Eg. alter table student_info
add email varchar(20);

alter table student_info
add constraint student_key primary key (Rollno);

- Alter modify is used when the data type or size of an existing table is to be modified. This query can also be used to add a not null constraint.

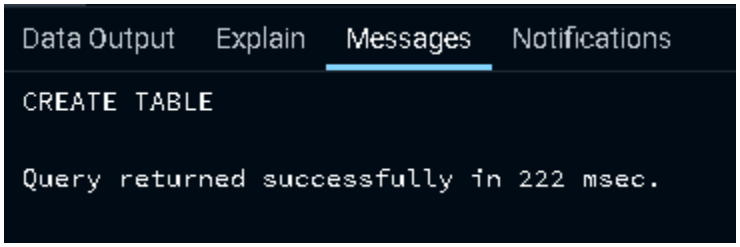
Syntax: alter table <name>
modify column_name datatype(size);



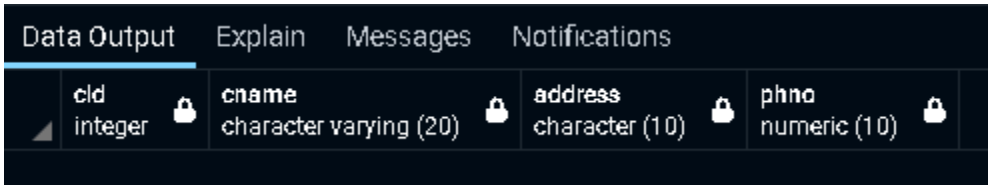
DDL Queries with Output:

1. Customer Table:

a. create table customer (cid int, cname varchar (20),address char(10));

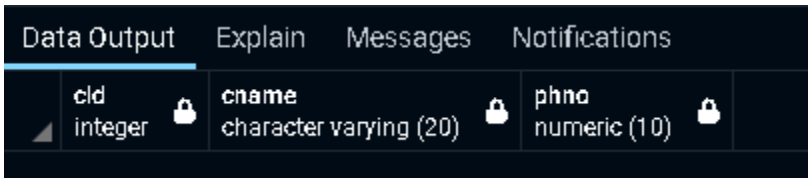


b. alter table customer add phno numeric (10);

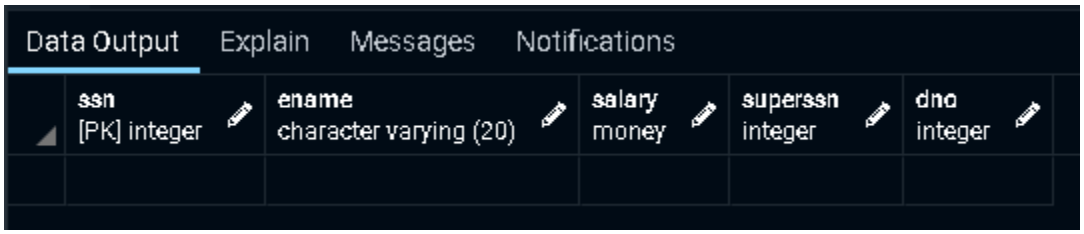


c. alter table customer modify address varchar (20);
alter table customer alter column address type varchar;

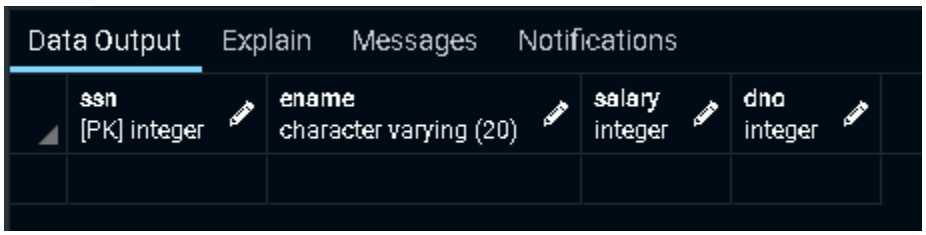
d. alter table customer drop column address;



2. Employee Table
a. create table employee (ssn int primary key, ename varchar(20) not null, salary int,dno int,Foreign key(dno) references dept(dno));

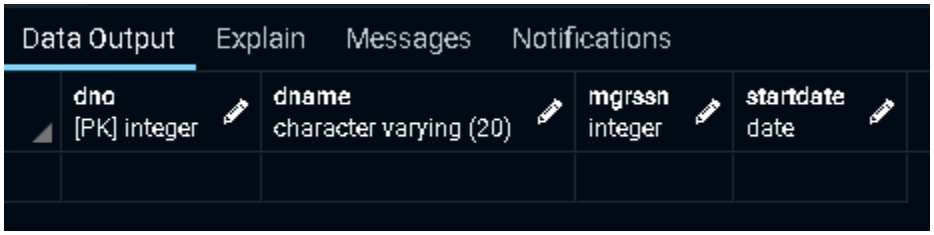


b. alter table employee add constraint fk_dno foreign key(dno) references dept1(dno);



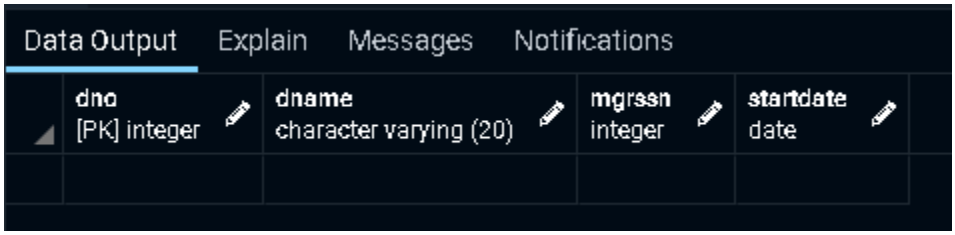
3. Department Table:

a. create table dept1(dno int primary key,dname varchar(20),mgrssn int references employee,startdate datetime);



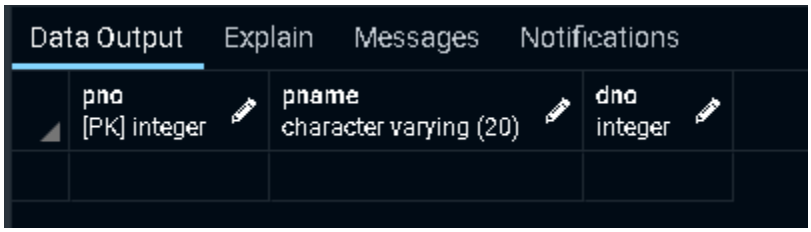
4. Deptlocation Table:

a. create table deptloc(dno int,dloc varchar(20),primary key(dno,dloc),foreign key(dno) references dept1(dno));



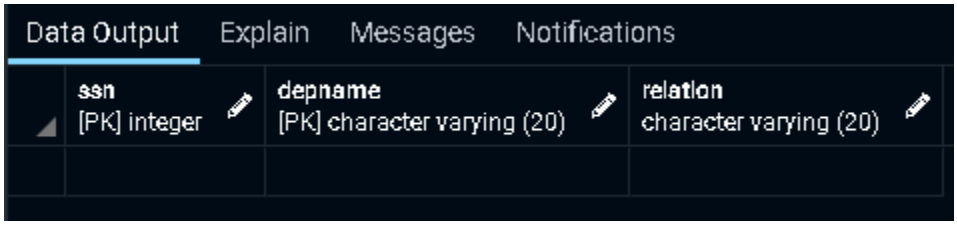
5. Project Table:

a. create table project (pno int primary key,pname varchar(20),dno int references dept1(dno));



6. Table Dependent:

a. create table dependent(ssn int,depname varchar(20),relation varchar(20), primary key(ssn,depname),foreign key(ssn) references employee(ssn));



Conclusion :- Thus we have learnt about various DDL Queries (Create, Alter, Drop, Truncate, Rename) in detail with proper Syntax and examples.