Lab Sheet-1

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Task :

Write PostgreSQL commands to create following tables along with the
given constraints and write down appropriate query for the questions
given below.
Project_Master-Description: Used to store Project information

Proj_SNO Char(10)
Primary key
Not null
Proj_Name Varchar(10)
Location Varchar(20)
Domain Varchar(20)
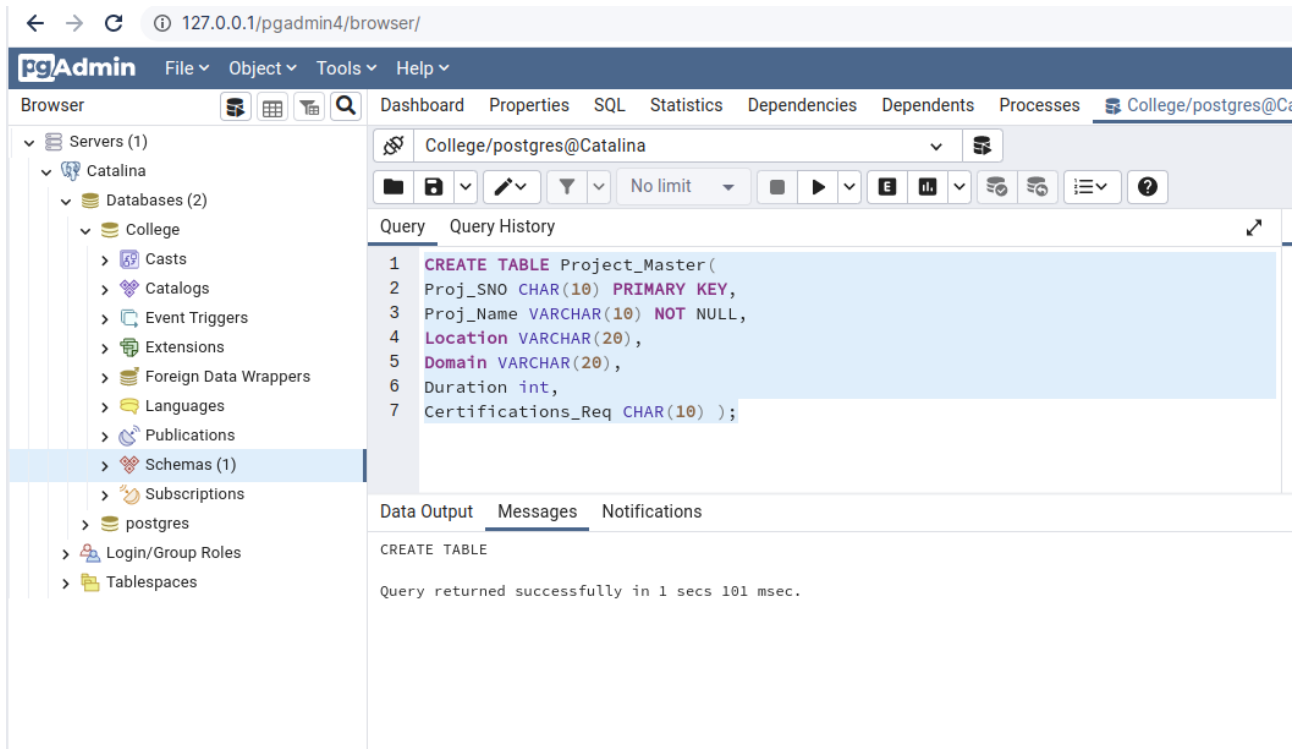Duration Integer
Certifications_Req Char(10)

Solution:

SQL:

CREATE TABLE Project_Master(
Proj_SNO CHAR(10) PRIMARY KEY,
Proj_Name VARCHAR(10) NOT NULL,
Location VARCHAR(20),
Domain VARCHAR(20),
Duration int,
Certifications_Req CHAR(10)   );

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Domain_Master- Description: Used to store Domain of Knowledge information

Domain_no
Description Char(10)
Primary key
Varchar(20) Not null
Scale_Expert Int
Training_Need Char(5)
Budget
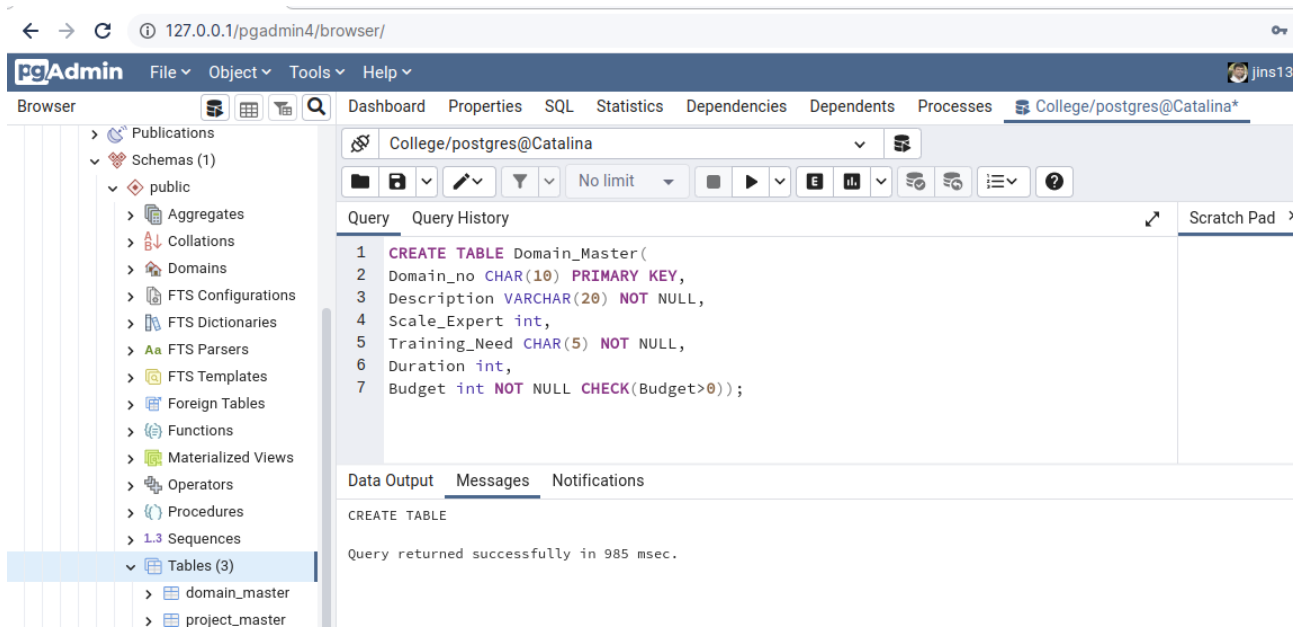Int
Not null
Not null, can not be 0

Solution

SQL:

CREATE TABLE Domain_Master(
Domain_no CHAR(10) PRIMARY KEY,
Description VARCHAR(20) NOT NULL,
Scale_Expert int,
Training_Need CHAR(5) NOT NULL,
Duration int,
Budget int NOT NULL CHECK(Budget>0));
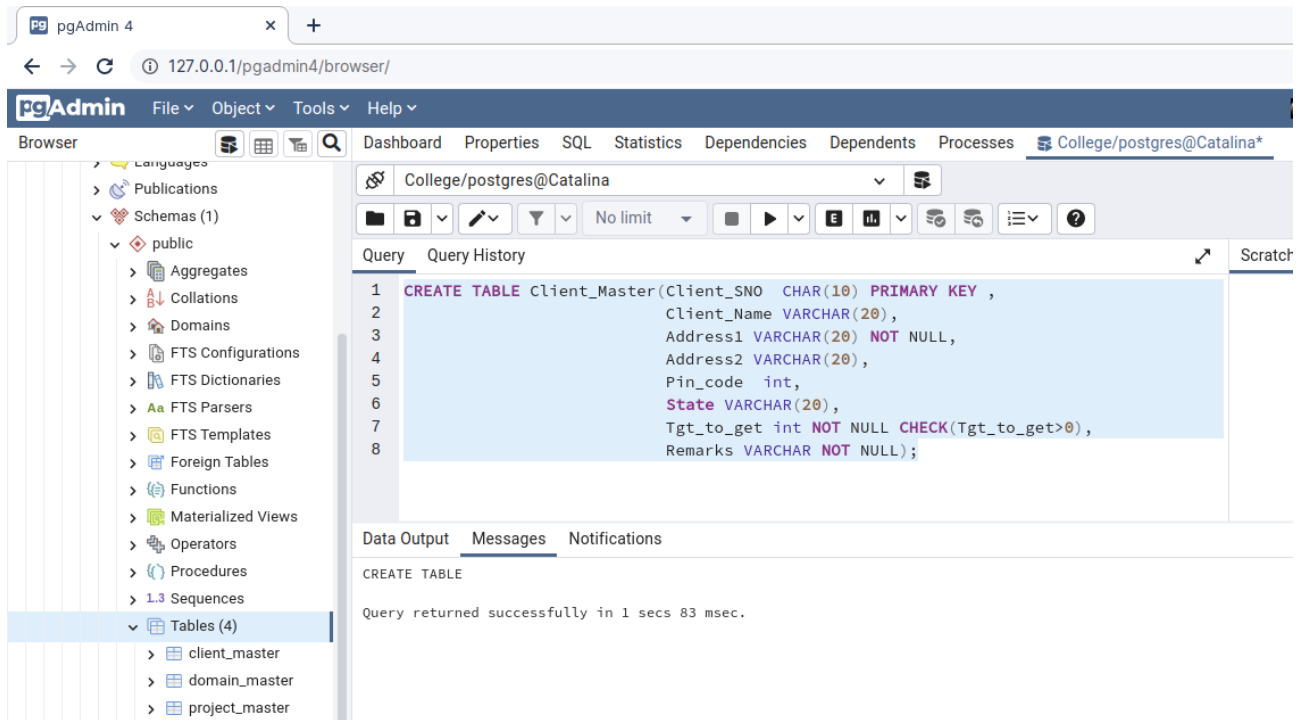
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Client_Master Description: Used to store Clients of the Company

SQL:
CREATE TABLE Client_Master(Client_SNO CHAR(10) PRIMARY KEY ,
                            Client_Name VARCHAR(20),
                            Address1 VARCHAR(20) NOT NULL,
                            Address2 VARCHAR(20),
                            Pin_code int,
                            State VARCHAR(20),
                            Tgt_to_get int NOT NULL CHECK(Tgt_to_get>0),
                            Remarks VARCHAR NOT NULL);

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Proj_Final : Description: Used to store Projects we have Completed(Logically).

SQL:

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CREATE TABLE proj_final(
        Order_no Integer PRIMARY KEY,
        Order_Date Date,
        Proj_SNO char(10),
        Billing_Done char(2),
        Final_Release_Date date CHECK(final_release_date>order_Date),
        proj_status varchar(20),
        foreign key(proj_sno) references project_master(proj_sno),
        check(proj_Status in ('In Process','Released','Escalation','Support')));
```
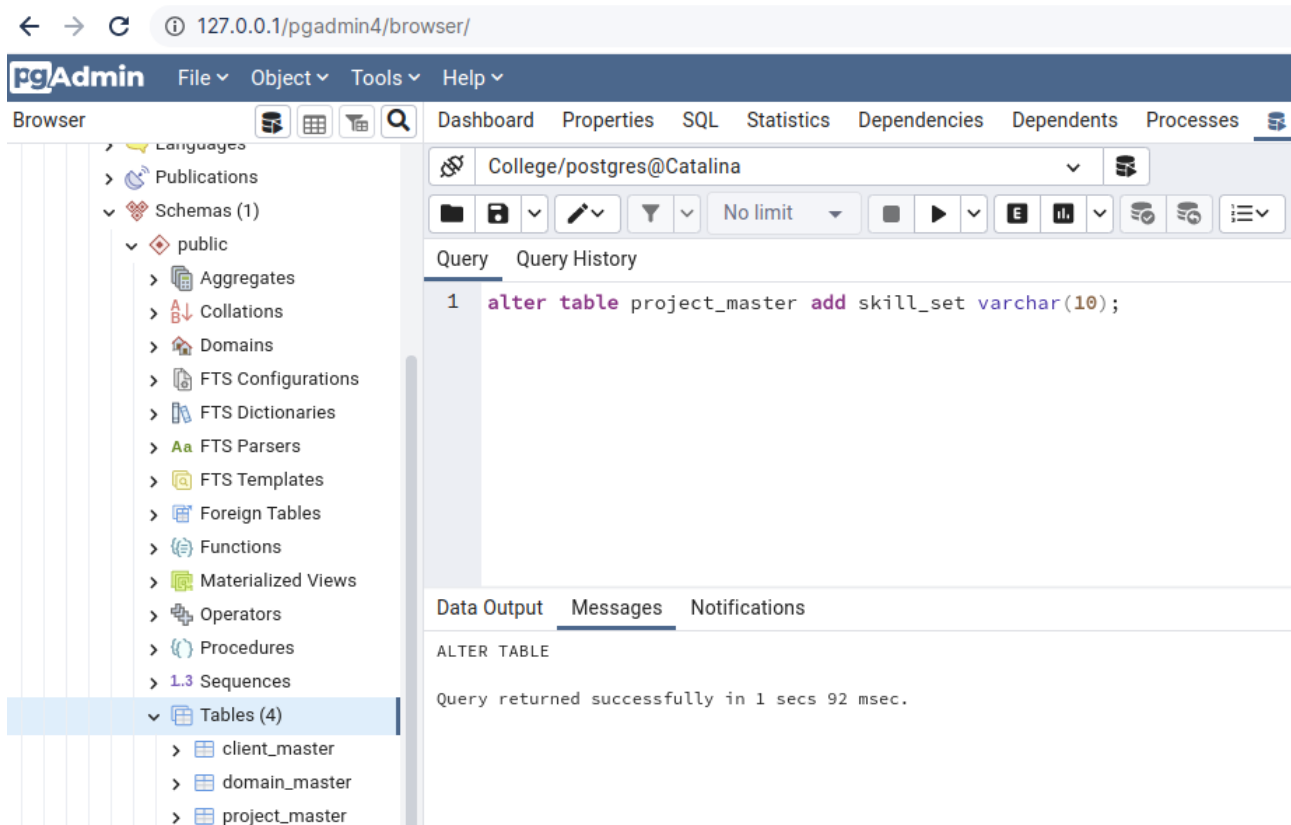
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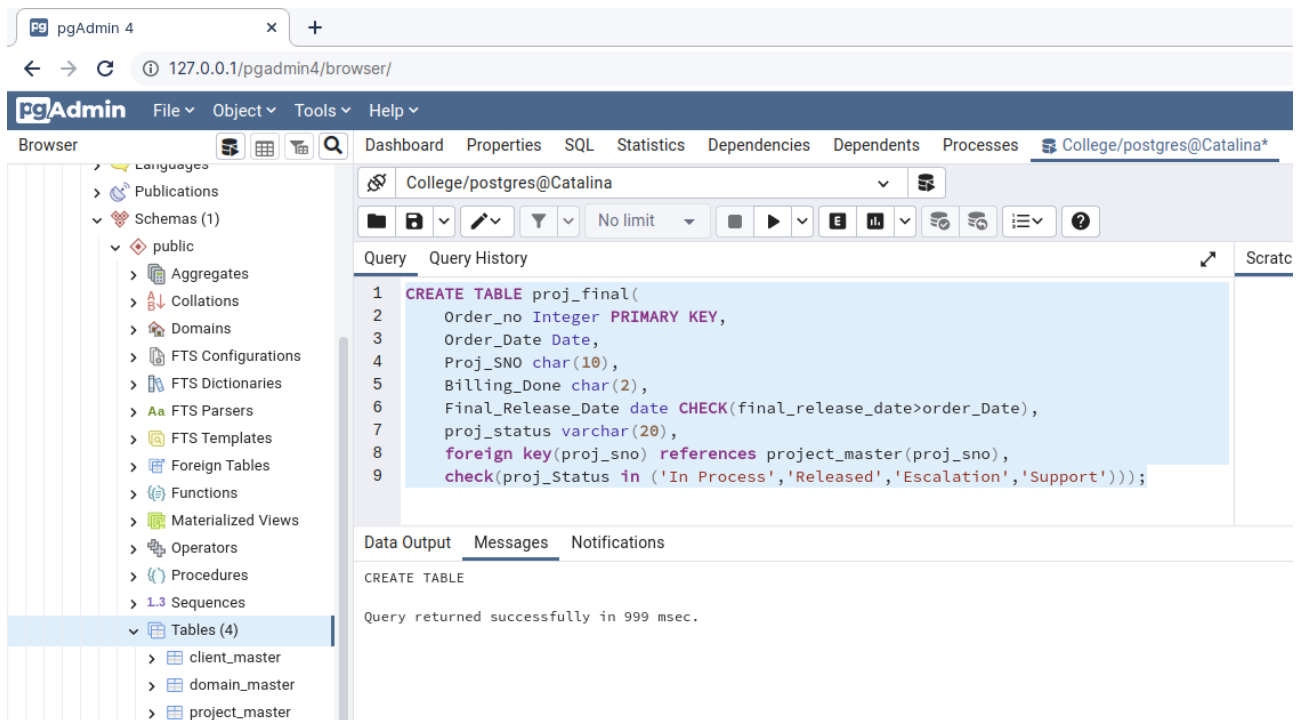
Tasks

1. Add column 'Skill_Set' with data type varchar to the Proj_Master table.

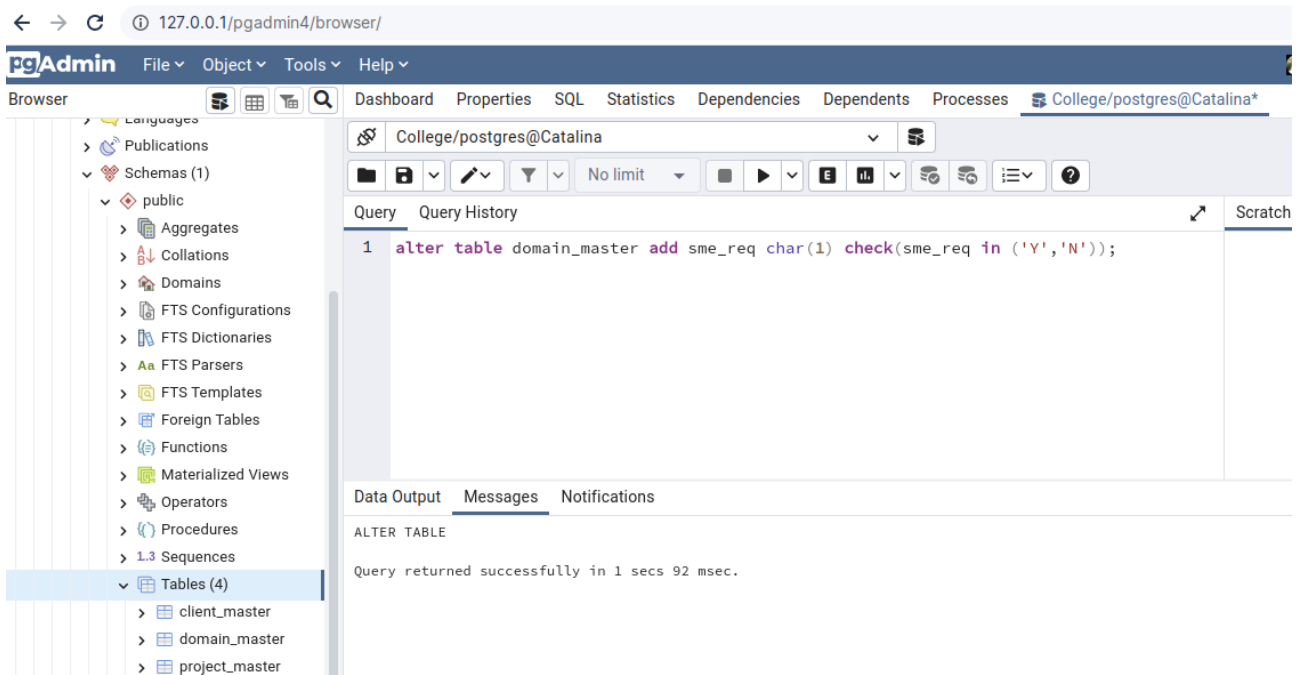alter table project_master add skill_set varchar(10);

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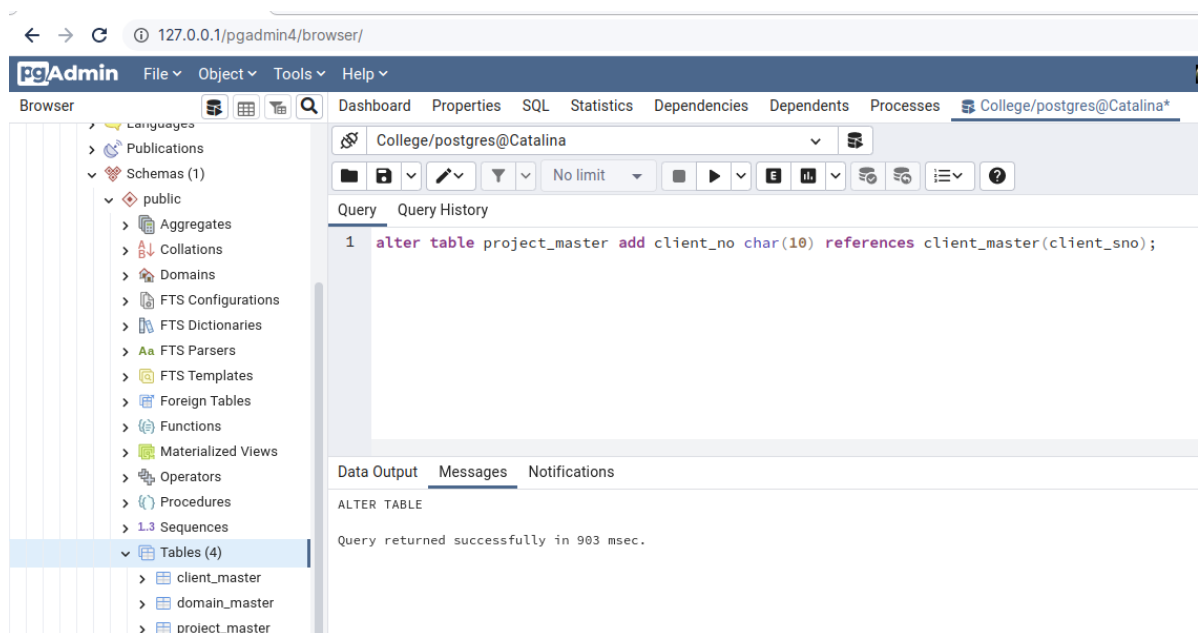1. Add a column 'SME_Req' to the Domain_Master table (Only takes values 'Y' or 'N')

   alter table domain_master add sme_req char(1) check(sme_req in ('Y','N'));

2. Add a column Client_no in Proj_Master table with proper referential integrity.(references client_no of client_master table).
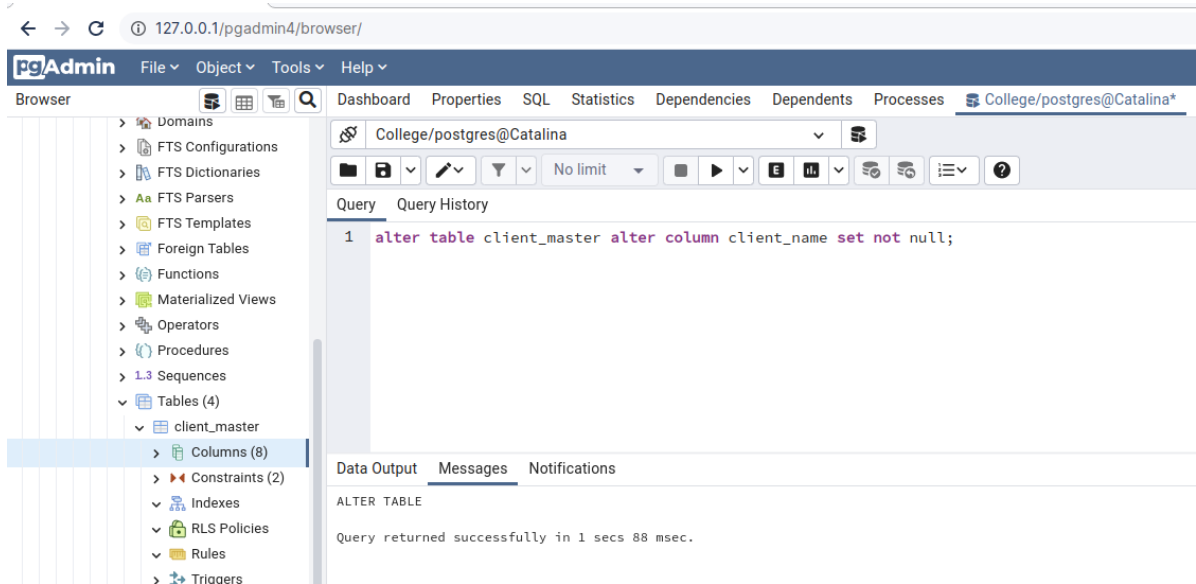
   alter table project_master add client_no char(10) references client_master(client_sno);

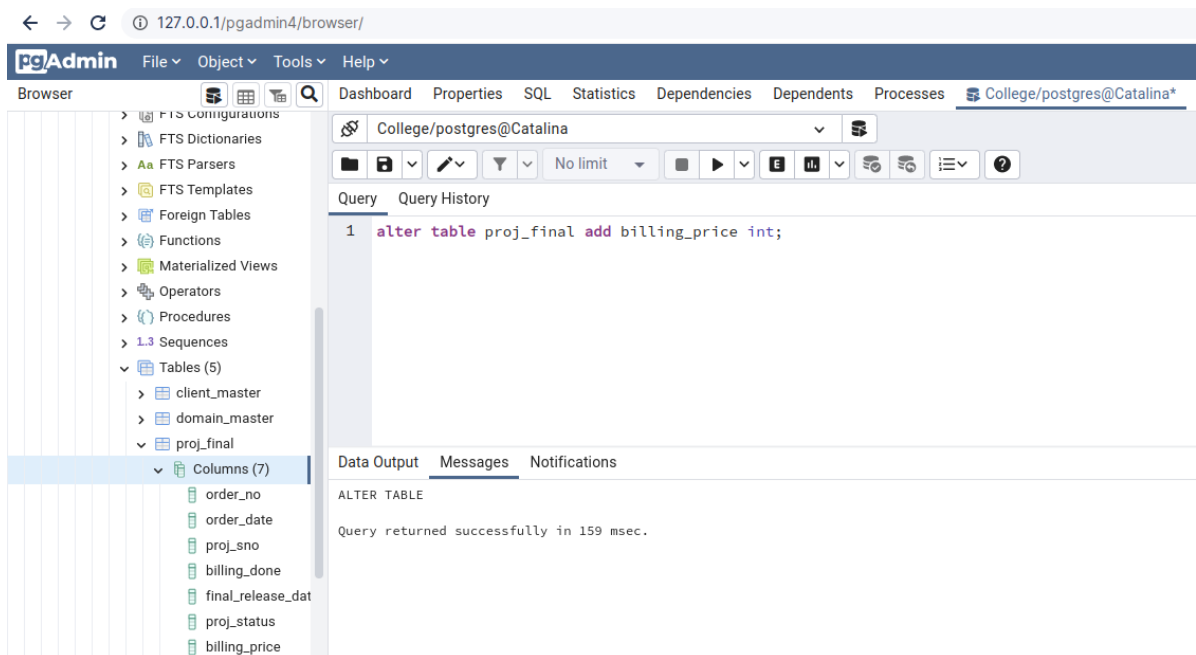3. Add "not null" constraint to Client_Name column of client_master table.

alter table client_master alter column client_name set not null;

4. Add Billing_price column in Project_Final table.
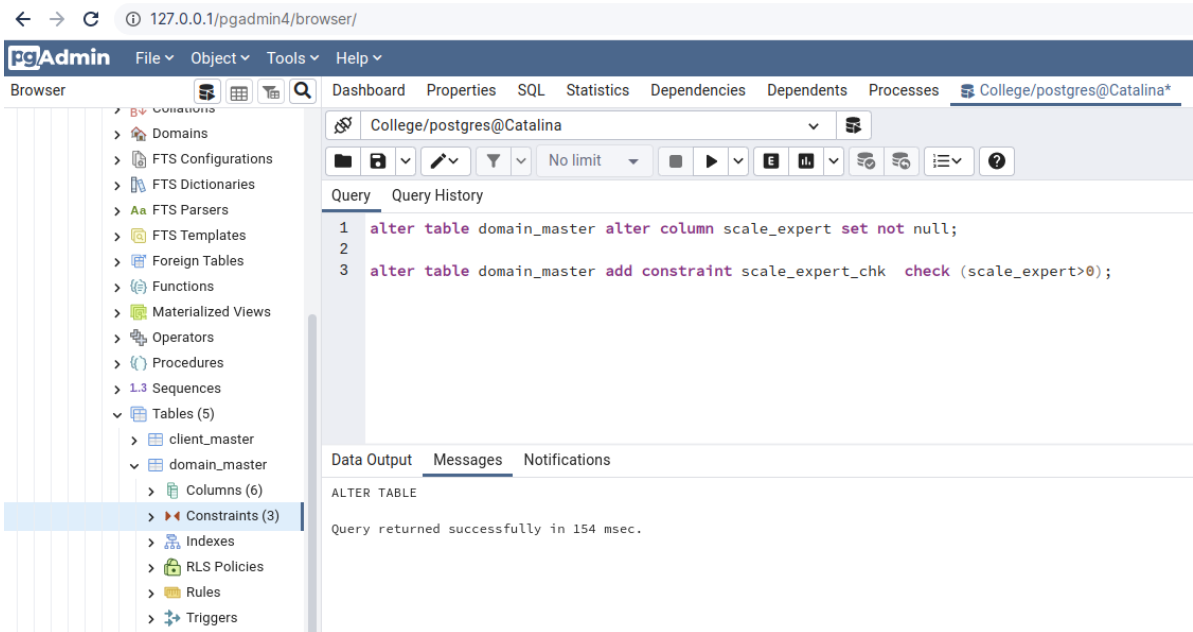
alter table proj_final add billing_price int;

5. Add 'Not null, cannot be 0' constraint to Scale_Expert column in Domain_Master table.

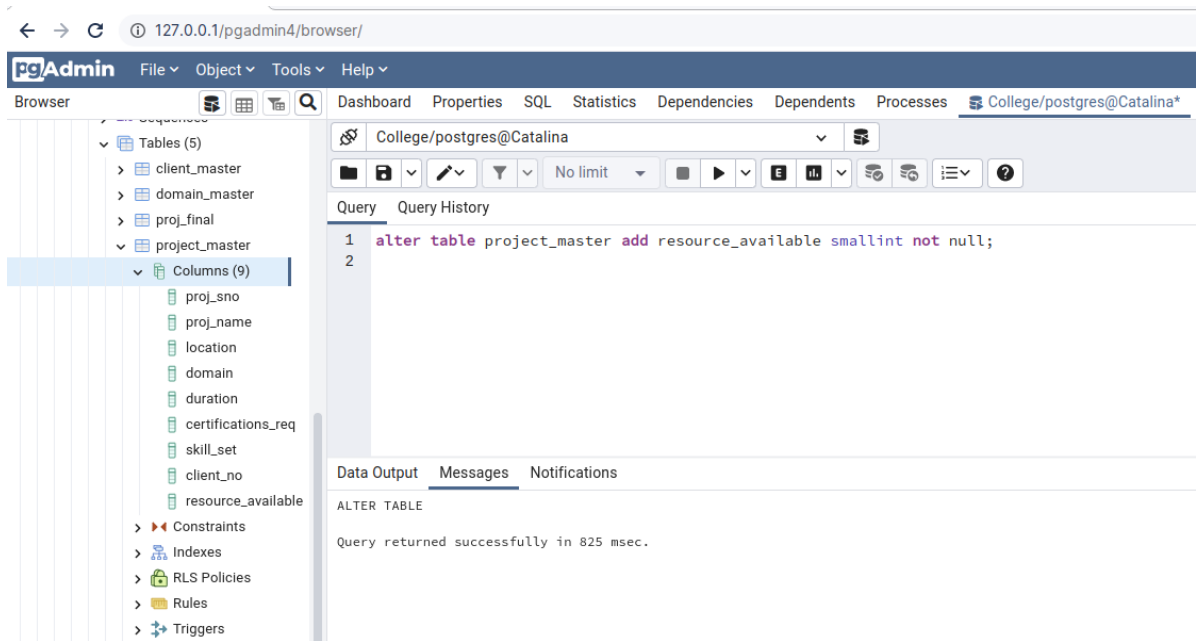alter table domain_master alter column scale_expert set not null;

alter table domain_master add constraint scale_expert_chk check (scale_expert>0);

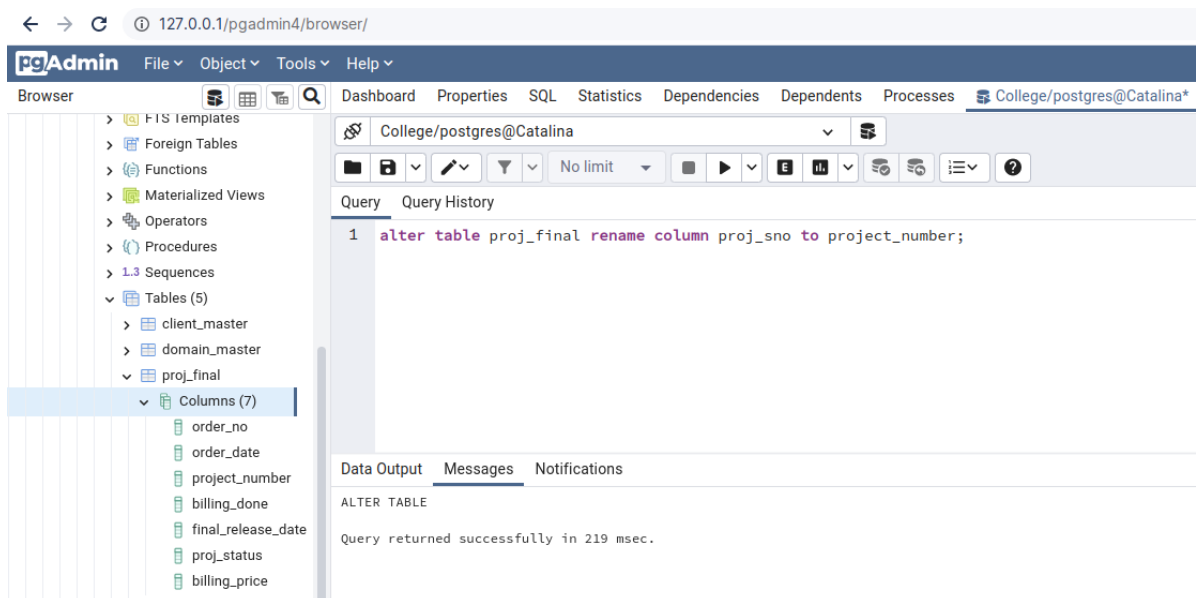6. Add 'Resource_Available' column with data type smallint and not null constraint in Project_Master table.

alter table project_master add resource_available smallint not null;

7. Rename the Project_SNO column of Proj_Final table to Project_Number.
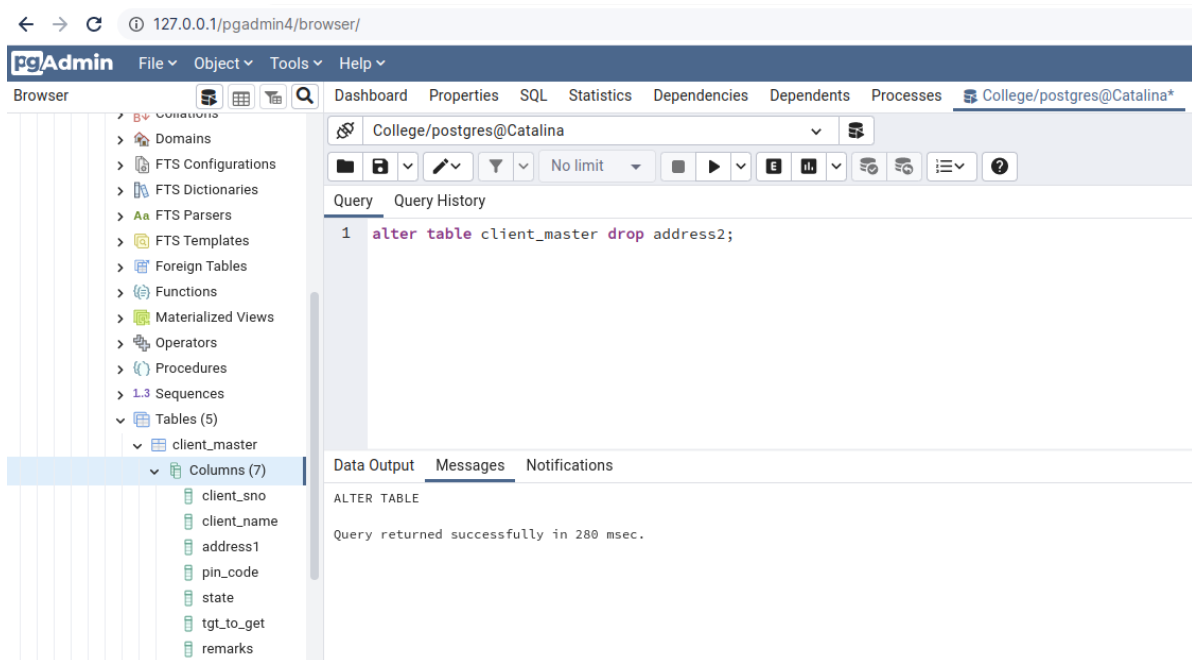
   alter table proj_final rename column proj_sno to project_number;

8. Delete the column address2 from client_master table.

alter table client_master drop address2;

9. Delete the column Location from Project_master table.

alter table project_master drop location;