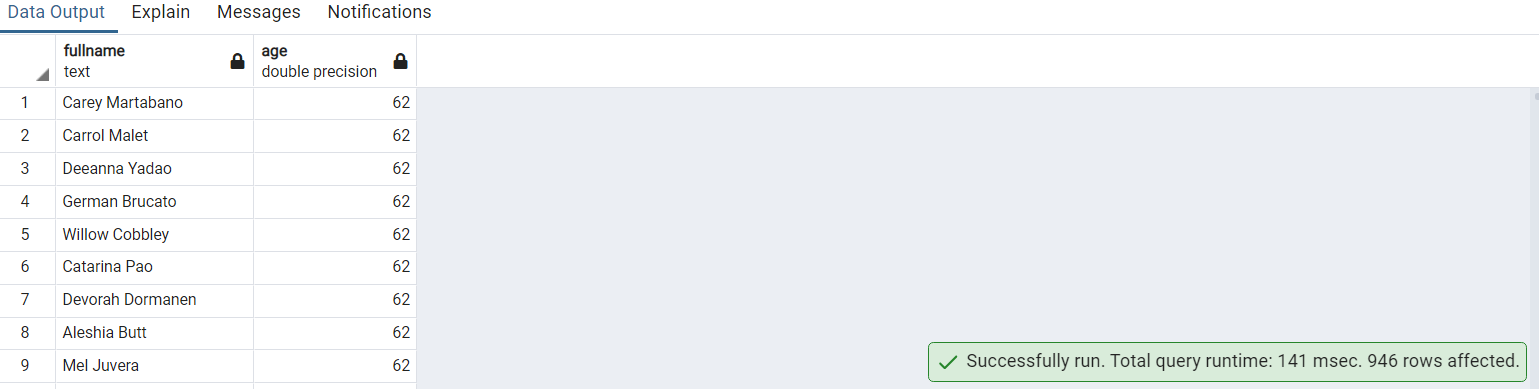
**Hospital data analysis using SQL**

**1. Get a list of Patients in order by DateOfBirth descending order**

select concat ("FirstName", ' ', "LastName") as FullName , date\_part('year', age("DateOfBirth")) as Age

from public."Patients"

order by Age DESC;



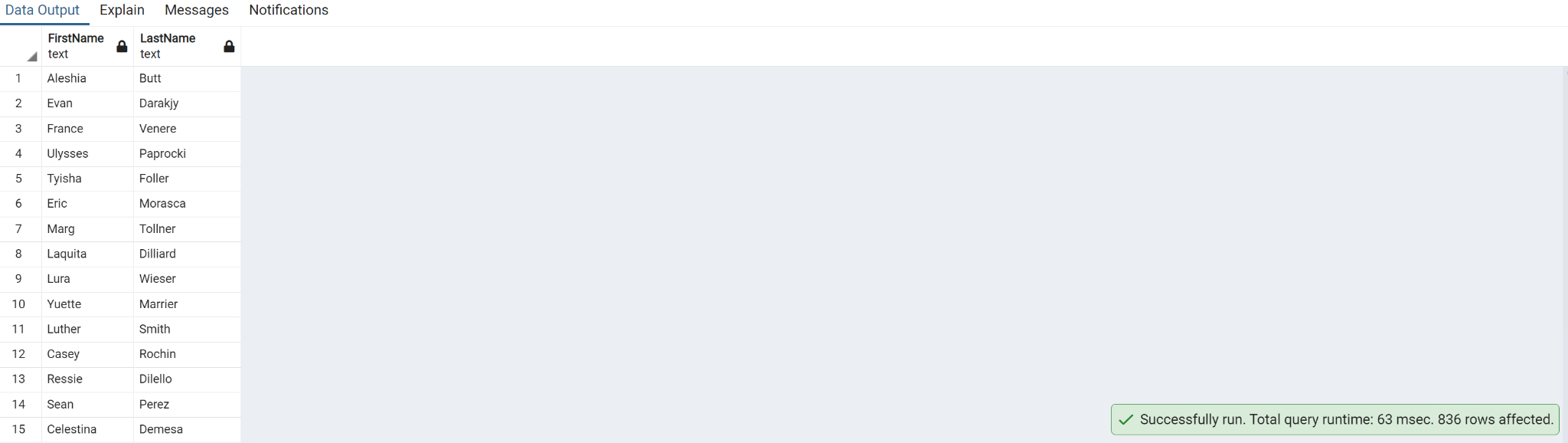
**2. Display the first name and Lastname of patients who speaks the English language.**

select p."FirstName",p."LastName"

from public."Patients" p

inner join public."Language" l On p." Language\_ID" = l."Language\_ID"

where "Language"='English';



**3. Write a query to get a list of patient IDs whose PrimaryDiagnosis is 'Flu'.order by patient\_ID**

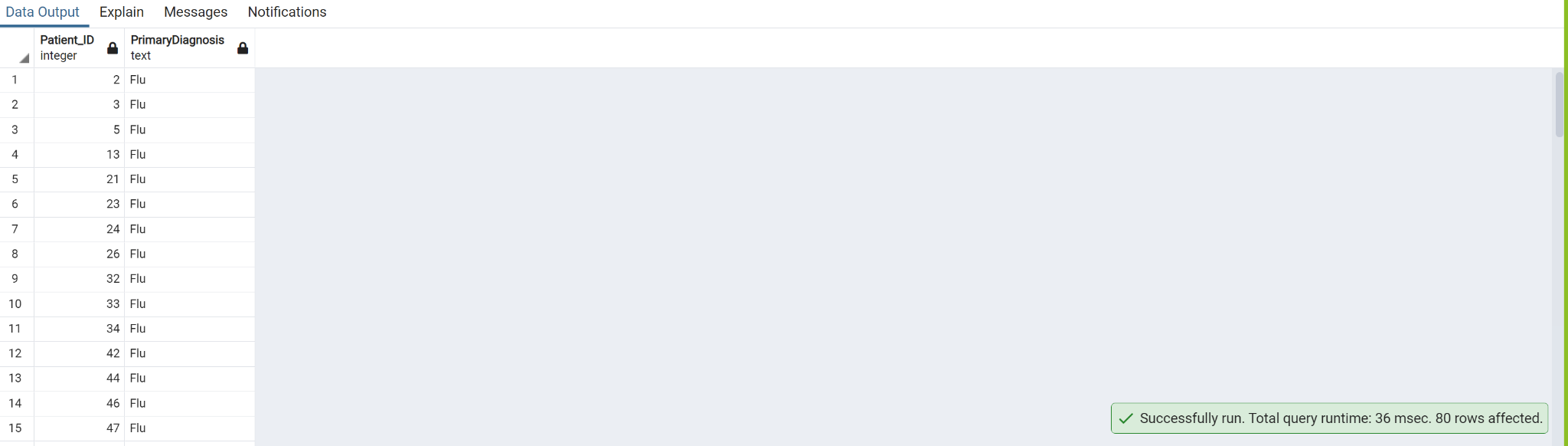
select r."Patient\_ID",p."PrimaryDiagnosis"

from the public."ReAdmissionRegistry" r

inner join public." PrimaryDiagnosis" p on r."Diagnosis\_ID" = p."Diagnosis\_ID"

where p."PrimaryDiagnosis" = 'Flu'

order by r."Patient\_ID";



**4. Write a query to find the Patient\_ID and Admission\_ID for the patients whose Primary diagnosis is 'Heart Failure'**

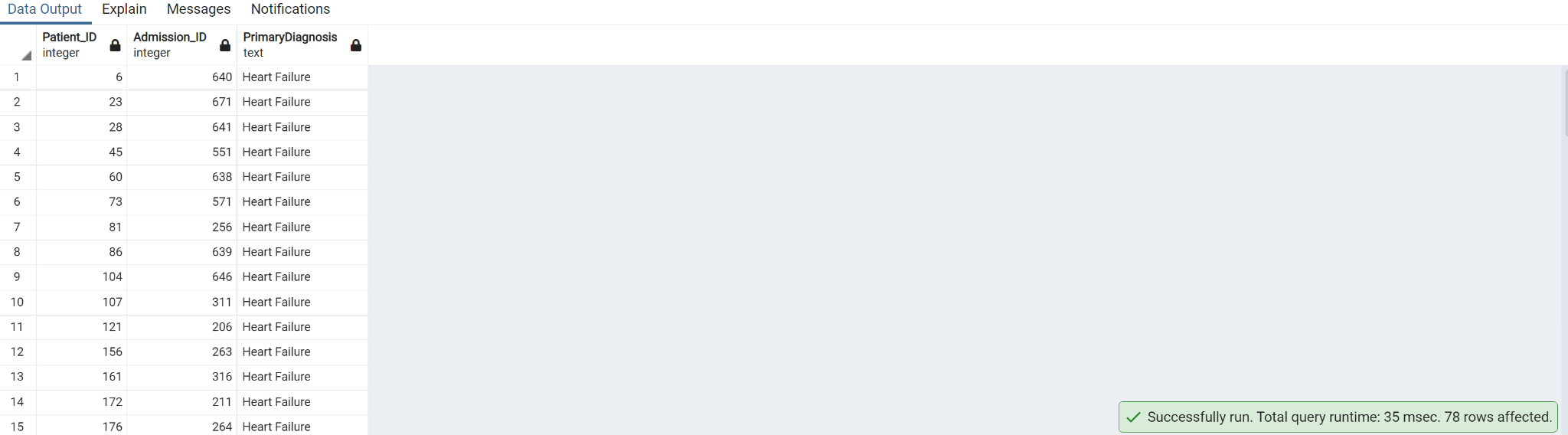
select d."Patient\_ID", d."Admission\_ID",p."PrimaryDiagnosis"

from the public."Discharges" d

inner join public." PrimaryDiagnosis" p on d."Diagnosis\_ID" = p."Diagnosis\_ID"

where p."PrimaryDiagnosis" = 'Heart Failure'

order by d."Patient\_ID";



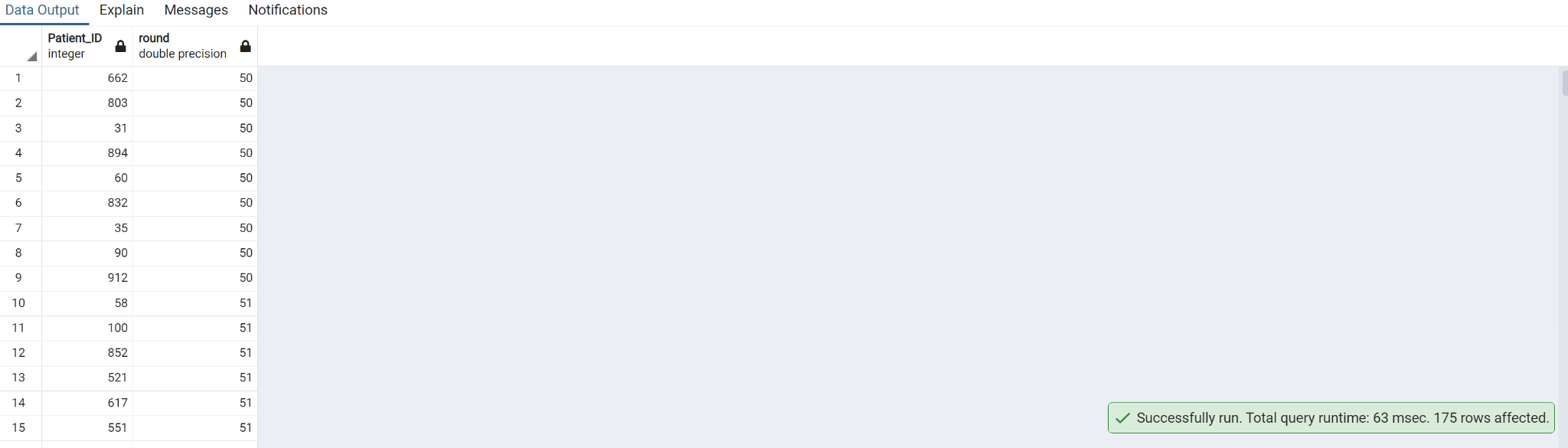
**5. Write a query to get a list of patient IDs whose pulse is below the normal range**

select "Patient\_ID",ROUND("Pulse")

from the public."AmbulatoryVisits"

where "Pulse"< 60

order by ROUND("Pulse");



**6. Write a query to find the list of patient\_ID's discharged with Service in SID01, SID02, and SID03.**

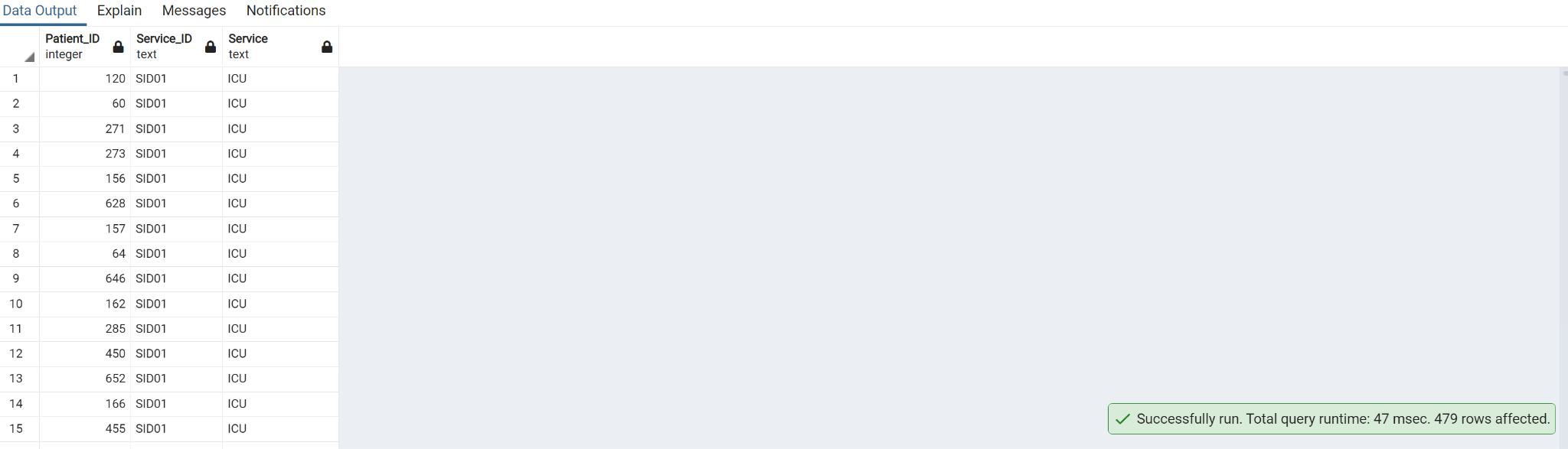
select d."Patient\_ID",s."Service\_ID",s."Service"

from the public."Discharges" d

inner join public."Service" s on s."Service\_ID"=d."Service\_ID"

where s."Service\_ID" in ('SID01', 'SID02', 'SID03')

order by s."Service\_ID";



**7. Write a query to get a list of patients who were admitted because of Stomachache.**

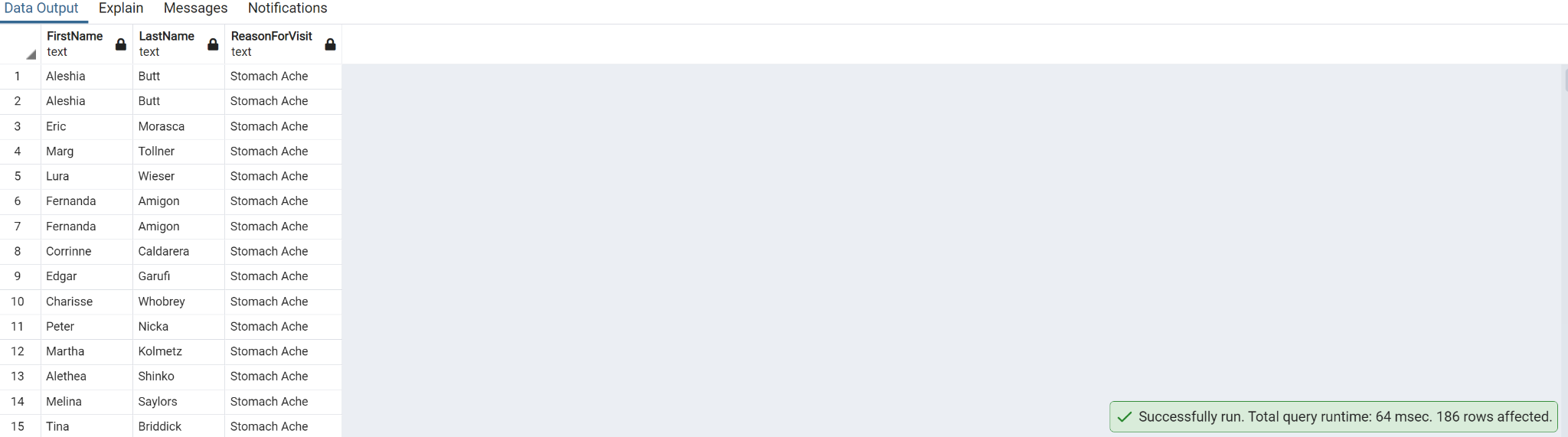
select p."FirstName",p."LastName",r."ReasonForVisit"

from public."Patients" p

inner join public." EDVisits" ed on p." Patient\_ID"=ed."Patient\_ID"

inner join public." ReasonForVisit" r on ed."Rsv\_ID"=r."Rsv\_ID"

where r."ReasonForVisit"='Stomach Ache';



**8. Write a query to Update Service ID SID05 to Ortho**

Update public."Service"

set "Service" =' Ortho'

where public."Service"."Service\_ID"='SID05';



**9. Get a list of Patient IDs whose visit type was 'Followup' and VisitdepartmentID is 5 or 6**

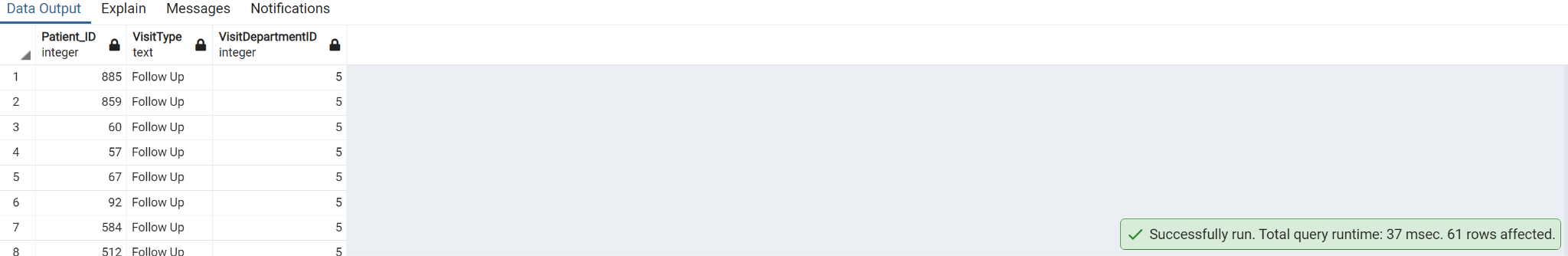
select a."Patient\_ID",v."VisitType",a."VisitDepartmentID"

from the public."AmbulatoryVisits" a

inner join public."VisitTypes" v on a."AMVT\_ID"=v."AMVT\_ID"

where v."VisitType"='Follow Up' and a."VisitDepartmentID" in (5, 6)

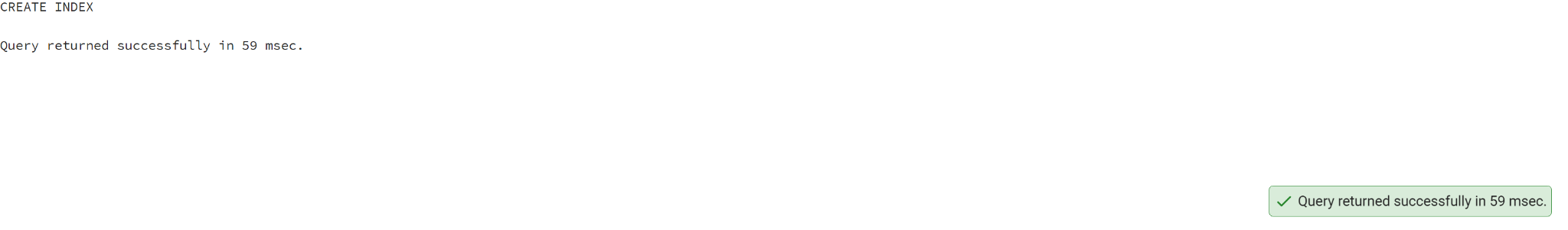
order by a."VisitDepartmentID";

****

**10. Create an index on an ambulatory visit by selecting columns Visit\_ID, AMVT\_ID and VisitStatus\_ID**

CREATE INDEX indx\_AmbulatoryVisits

ON public."AmbulatoryVisits" ("Visit\_ID", "AMVT\_ID", "VisitStatus\_ID");



**11. Create a trigger to execute after inserting a record into the Patients table. Insert value to display result.**

CREATE TABLE IF NOT EXISTS public."Patients\_new"

(

"Patient\_ID" integer NOT NULL,

"FirstName" text,

"LastName" text,

"DateOfBirth" date,

"Gender\_ID" text,

"Race\_ID" text,

"Language\_ID" text

);

CREATE OR REPLACE FUNCTION public." Patients\_fuct"()

RETURNS trigger AS

$$

BEGIN

INSERT INTO public."Patients\_new"("Patient\_ID", "FirstName", "LastName", "DateOfBirth", "Gender\_ID", "Race\_ID", "Language\_ID")

VALUES(NEW."Patient\_ID", NEW."FirstName", NEW."LastName", NEW."DateOfBirth", NEW."Gender\_ID", NEW."Race\_ID", NEW."Language\_ID");

RETURN NEW;

END;

$$

LANGUAGE 'plpgsql';



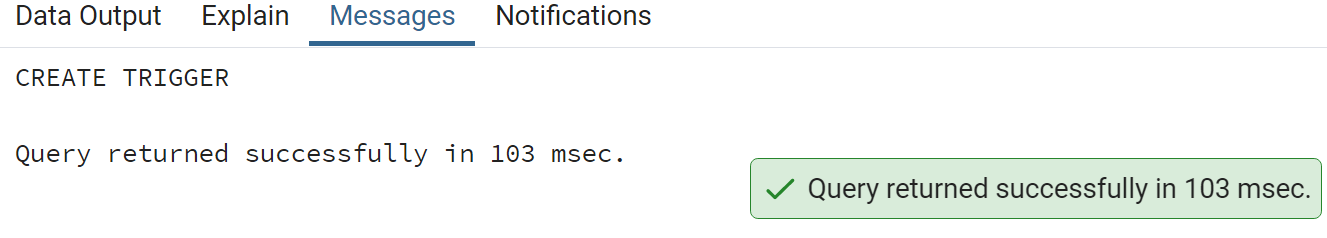
CREATE TRIGGER patients\_tri

AFTER INSERT

ON public."Patients"

FOR EACH ROW

EXECUTE PROCEDURE public."Patients\_fuct"();



INSERT INTO public."Patients"

("Patient\_ID", "FirstName", "LastName", "DateOfBirth", "Gender\_ID", "Race\_ID", "Language\_ID")

VALUES (10000, 'Priya', 'sowale', '1990-01-01', 'G001', 'R01', 'L\_01');

Select \* from public."Patients\_new";

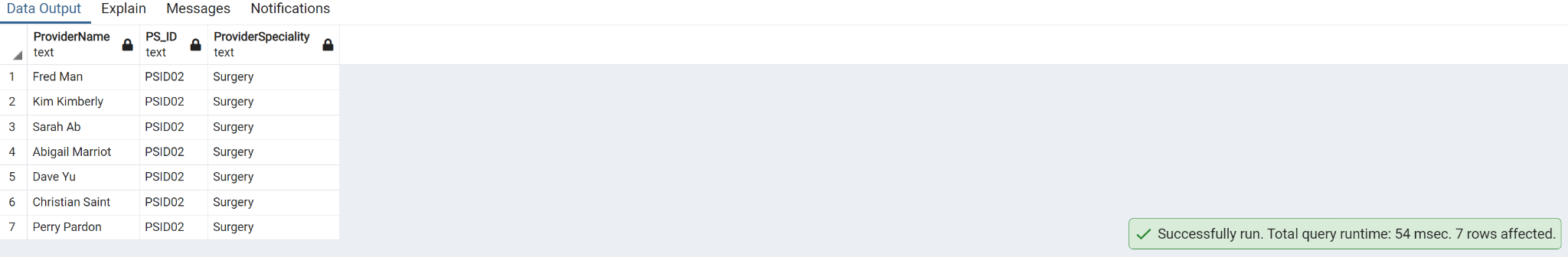
**12. Write a query to find the ProviderName and Provider Speciality for PS\_ID =' PSID02'**

select p."ProviderName",ps."PS\_ID",ps."ProviderSpeciality"

from the public."Providers" p

inner join public." ProviderSpeciality" ps on ps."PS\_ID"=p."PS\_ID"

where ps."PS\_ID"= 'PSID02';



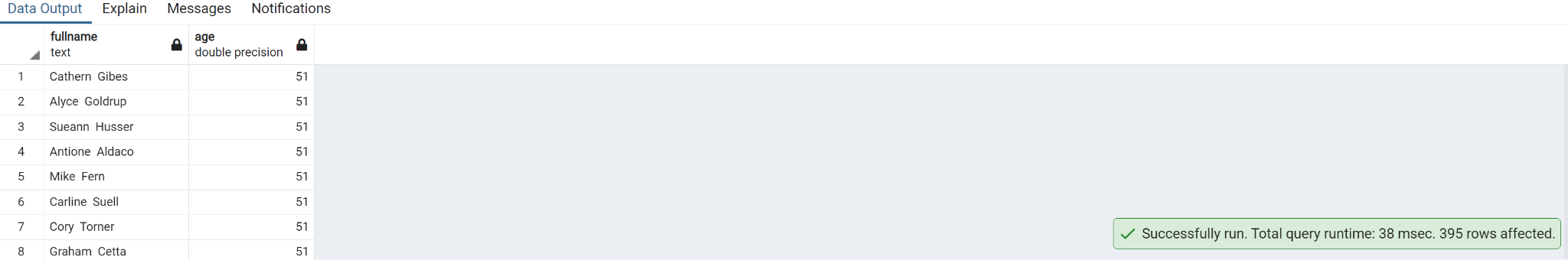
**13. Display the patient names and ages whose age is more than 50 years**

SELECT CONCAT("FirstName",' ', "LastName") AS FullName , date\_part('year', age("DateOfBirth")) AS Age

FROM public."Patients"

WHERE date\_part('year', age("DateOfBirth")) > 50

order by date\_part('year', age("DateOfBirth"));



**14. Write a query to get a list of patient ID'sand services whose are in service as 'Neurology'**

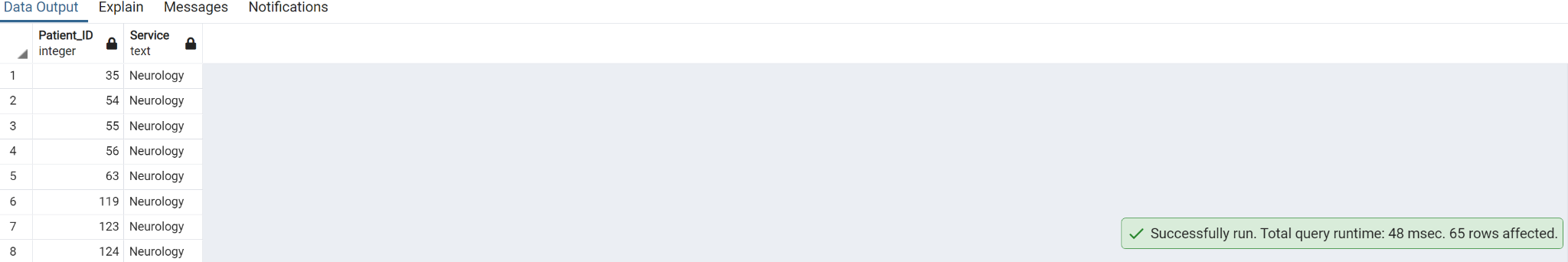
SELECT r."Patient\_ID",s."Service"

FROM public."Service" s

INNER JOIN public."ReAdmissionRegistry" r ON s."Service\_ID" =r."Service\_ID"

where s."Service" = 'Neurology'

order by r."Patient\_ID";

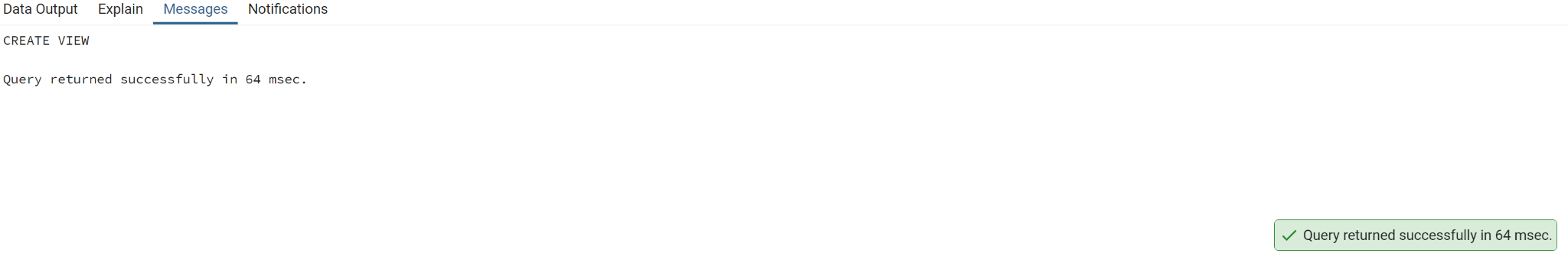


**15. Create view on table Provider table on columns ProviderName and Provider\_ID**

CREATE VIEW "Provider\_public" AS

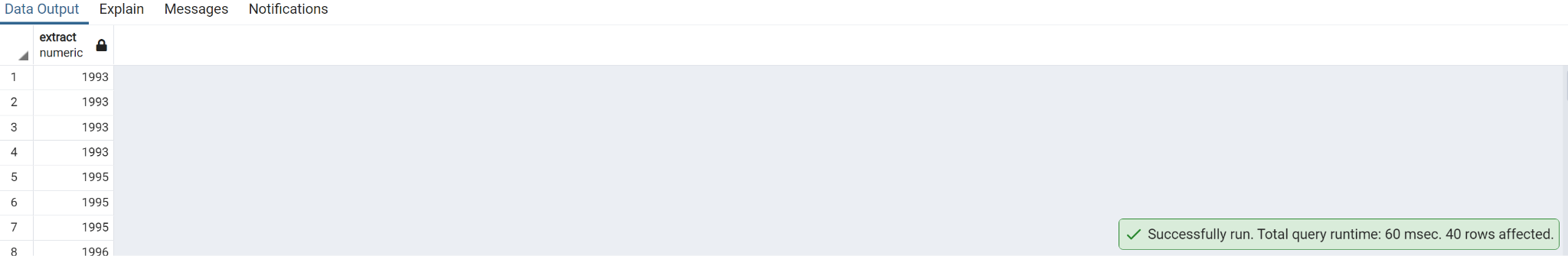
SELECT "ProviderName", "Provider\_ID"

FROM public."Providers";



**16. Write a query to Extract Year from ProviderDateOnStaff**

select extract (year from "ProviderDateOnStaff" ) from public."Providers";



**17. Write a query to get unique Patient\_ID,race and Language of patients whose race is White and also speak English.**

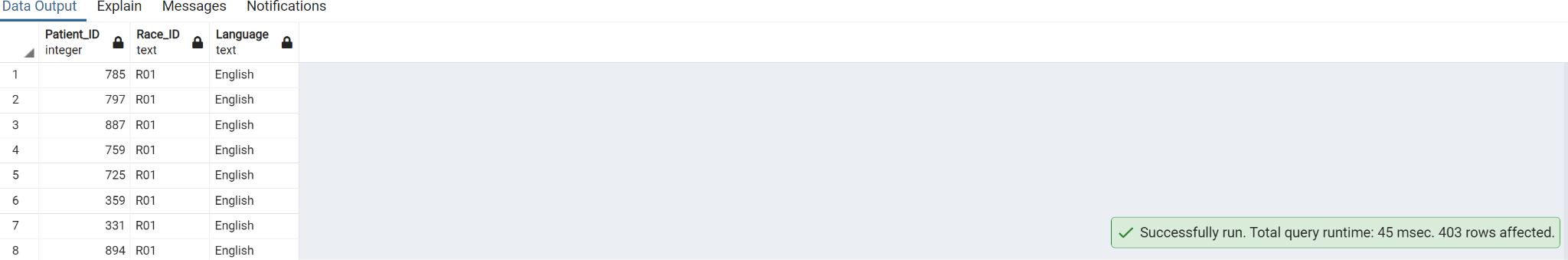
select distinct p."Patient\_ID",r."Race\_ID",l."Language"

from public."Patients" p

inner join public."Race" r on p."Race\_ID"=r."Race\_ID"

inner join public."Language" l on l."Language\_ID"=p."Language\_ID"

where "Race"='White' and "Language"='English';



**18. Get list of patient ID's whose service was 'Cardiology' and discharged to 'Home'**

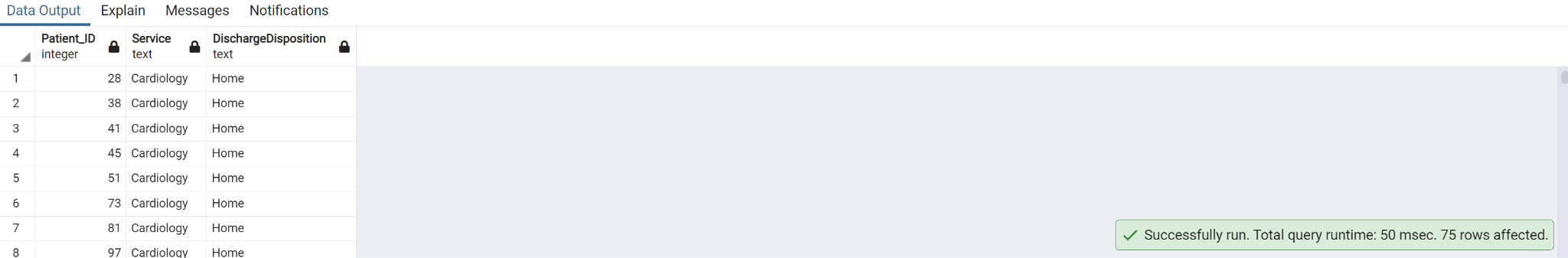
select d."Patient\_ID", s."Service",dp."DischargeDisposition"

from public."Discharges" d

inner join public."Service" s on s."Service\_ID"=d."Service\_ID"

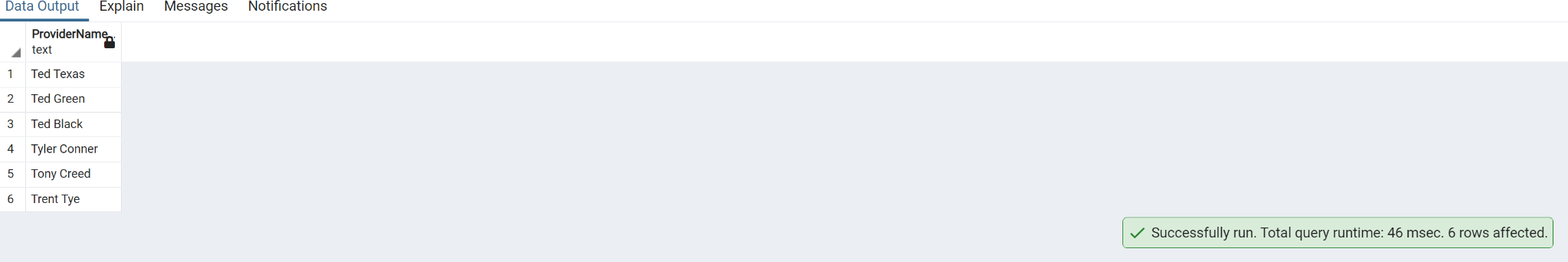
inner join public."DischargeDisposition" dp on dp."Discharge\_ID"=d."Discharge\_ID"

where "Service" ='Cardiology' and "DischargeDisposition"='Home';

****

**19. Write a query to get list of Provider names whose Providername is starting with letter T**

select "ProviderName" from public."Providers" where upper("ProviderName") like 'T%';



**20. List female patients over the age of 40 who have undergone surgery from January-March 2019**

select "FirstName","LastName",date\_part('year',Age(now(),"DateOfBirth")) as Age,"DateofVisit","ProviderSpeciality",VS."VisitStatus"

from public."Patients" PA

join public."AmbulatoryVisits" AV on PA."Patient\_ID" = AV."Patient\_ID"

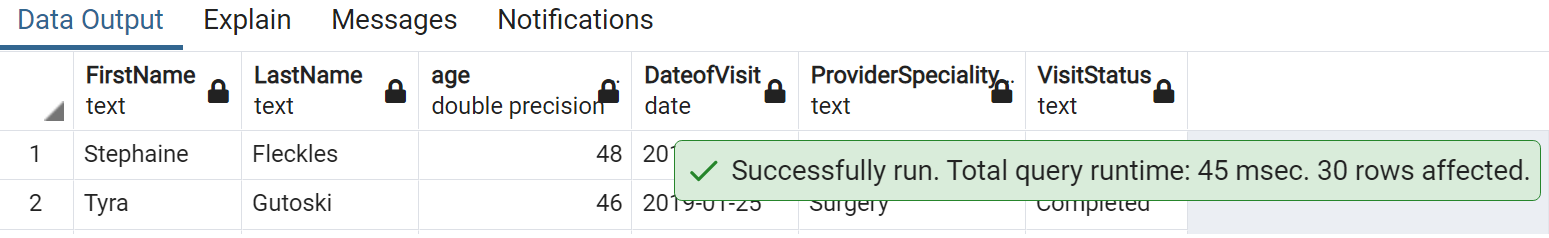
join public."Providers" PR on AV."Provider\_ID"=PR."Provider\_ID"

join public."ProviderSpeciality" PS on PR."PS\_ID" = PS."PS\_ID"

join public."VisitStatus" VS on AV."VisitStatus\_ID" = VS."VisitStatus\_ID"

where "Gender\_ID" = 'G002' and date\_part('year',Age(now(),"DateOfBirth"))>40 and "ProviderSpeciality" = 'Surgery' and VS."VisitStatus\_ID" = 'VS002'

and "DateofVisit" between '2019-01-01' and '2019-03-31' order by "DateofVisit"

****

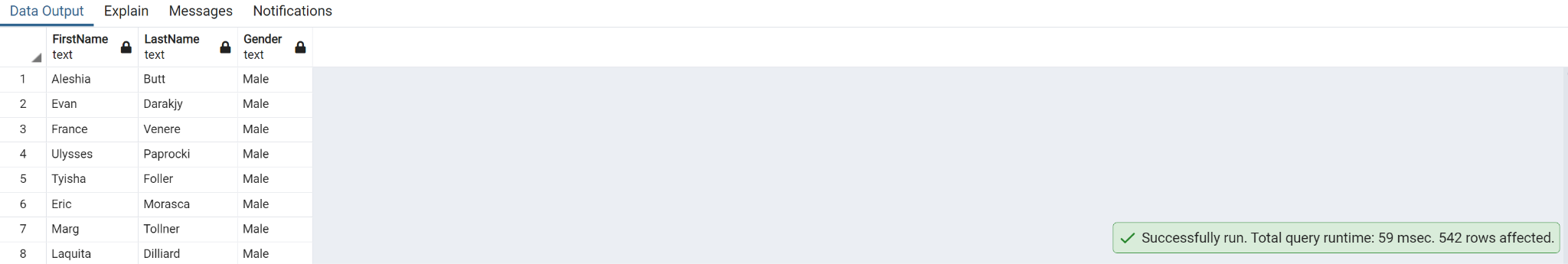
**21. Write a Query to get list of Male patients.**

select p."FirstName",p."LastName", g."Gender"

from public."Patients" p

inner join "Gender" g on p."Gender\_ID"=g."Gender\_ID"

where "Gender"='Male';

****

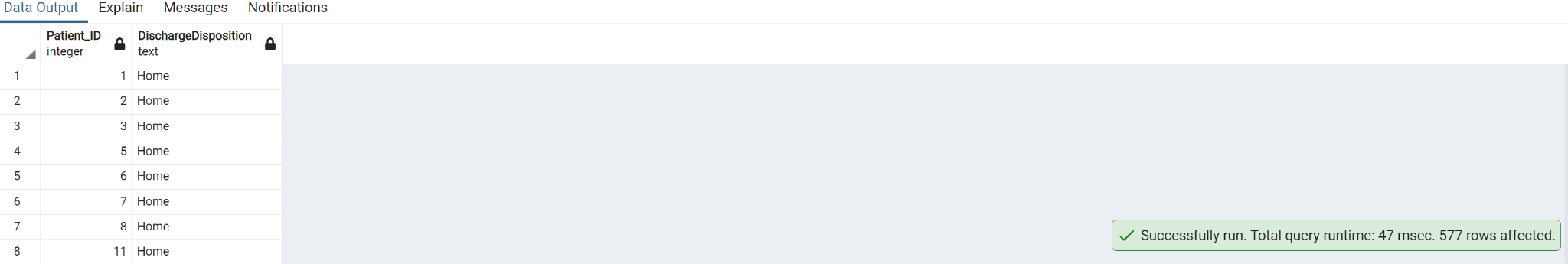
**22. Write a query to get list of patient ID's who has discharged to home.**

select d."Patient\_ID",dp."DischargeDisposition"

from public."Discharges" d

inner join public."DischargeDisposition" dp on dp."Discharge\_ID"=d."Discharge\_ID"

where "DischargeDisposition"='Home';



**23. Find the category of illness(Stomach Ache or Migraine) that has maximum number of patients**

Select "ReasonForVisit", count(\*) As "Total\_Number\_Patients"

from public."Patients" p

inner join public."EDVisits" ed on p."Patient\_ID" = ed."Patient\_ID"

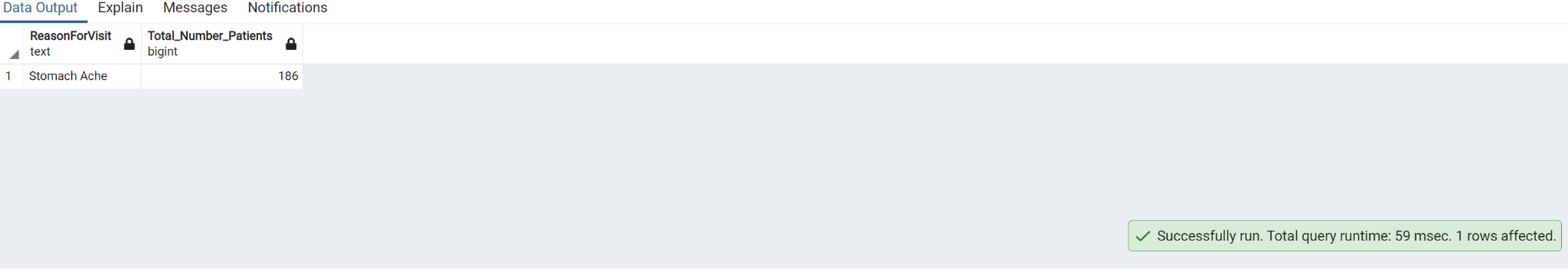
inner join public."ReasonForVisit" rv on ed."Rsv\_ID" = rv."Rsv\_ID"

where "ReasonForVisit" in ('Stomach Ache', 'Migraine')

group by "ReasonForVisit"

order by "Total\_Number\_Patients" DESC

limit 1;



**24. Write a query to get list of New Patient ID's.**

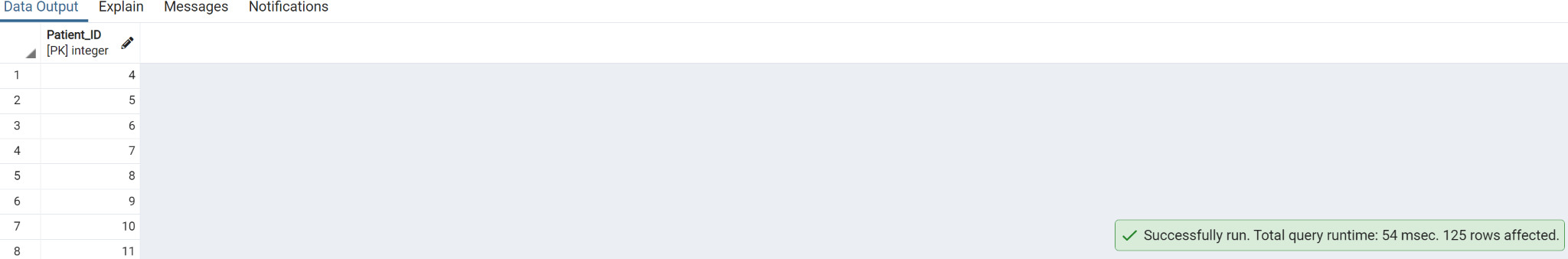
select p."Patient\_ID"

from public."Patients"p

inner join public."AmbulatoryVisits" a on a."Patient\_ID"=p."Patient\_ID"

inner join public."VisitTypes" v on v."AMVT\_ID"=a."AMVT\_ID"

where "VisitType"='New';



**25. Create trigger on table Readmission registry**

Create trigger ReAdmission\_Trigger

BEFORE UPDATE

ON public."ReAdmissionRegistry"

FOR EACH ROW

EXECUTE PROCEDURE ReAdmission\_function();

CREATE FUNCTION ReAdmission\_function()

RETURNS trigger as

$$

BEGIN

IF Patient\_ID=1 THEN

UPDATE Patients."ReadmissionEntry"

SET NEW."Discharge\_ID"='DID11';

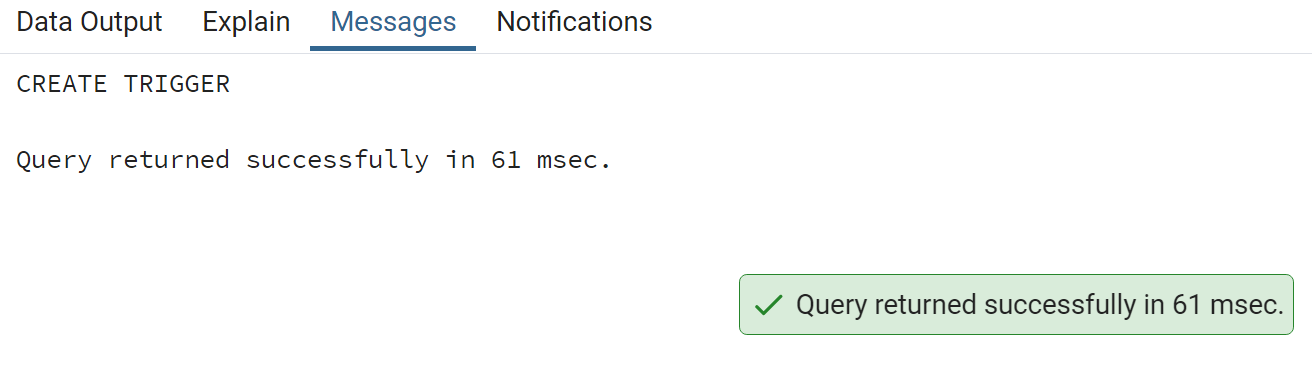
END IF;

RETURN NEW;

END;

$$

LANGUAGE 'plpgsql';

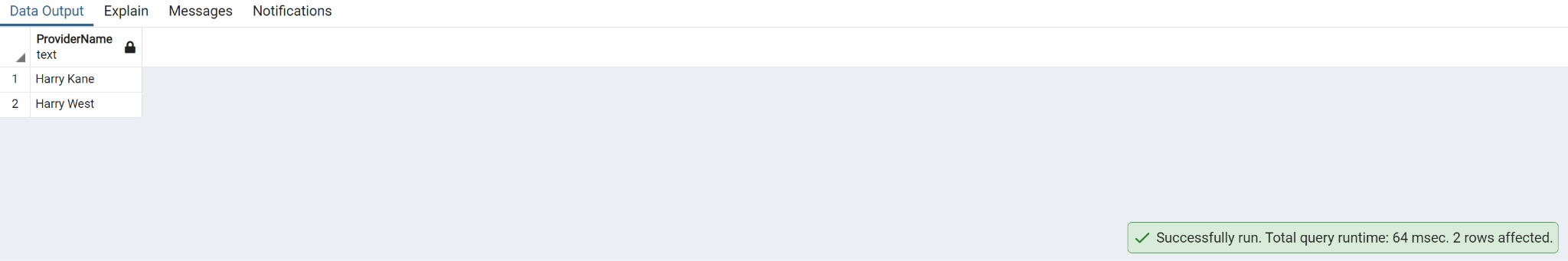


**26. Select all providers with a name starting 'h' followed by any character , followed by 'r', followed by any character,followed by 'y'**

select "ProviderName"

from public."Providers"

where "ProviderName" like 'h\_r\_y';



**27. Show the list of the patients who have cancelled their appointment**

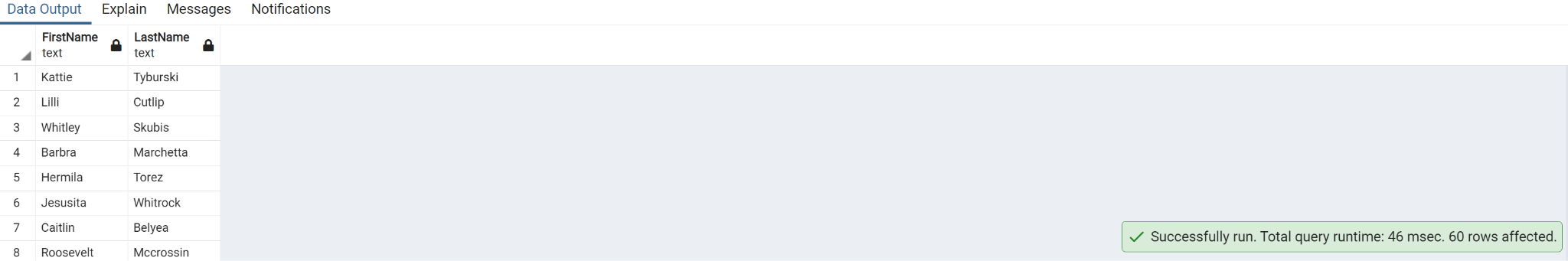
select p."FirstName",p."LastName"

from public."Patients" p

inner join public."AmbulatoryVisits" a on a."Patient\_ID"=p."Patient\_ID"

inner join public."VisitStatus" v on v."VisitStatus\_ID"=a."VisitStatus\_ID"

where v."VisitStatus"='Canceled';

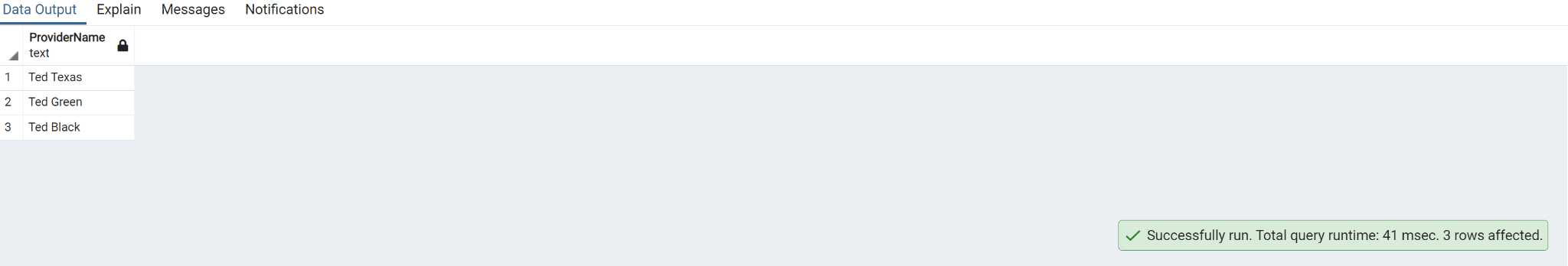


**28. Write a query to get list of ProviderName's with a name starting 'ted'**

select "ProviderName"

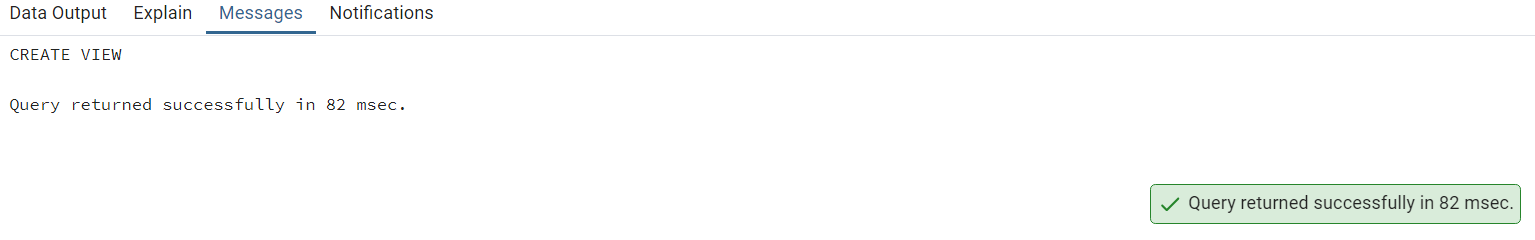
from public."Providers"

where lower("ProviderName") like 'ted%';



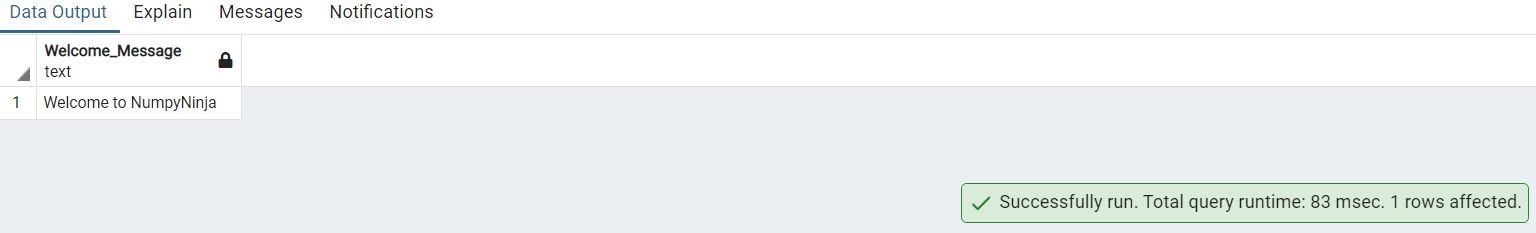
**29. Create a view without using any schema or table and check the created view using select statement**

CREATE VIEW "Welcome" AS SELECT 'Welcome to NumpyNinja' AS "Welcome\_Message";



SELECT \*

FROM "Welcome" ;



**30. Write a query to get unique list of Patient Id's whose reason for visit is car accident.**

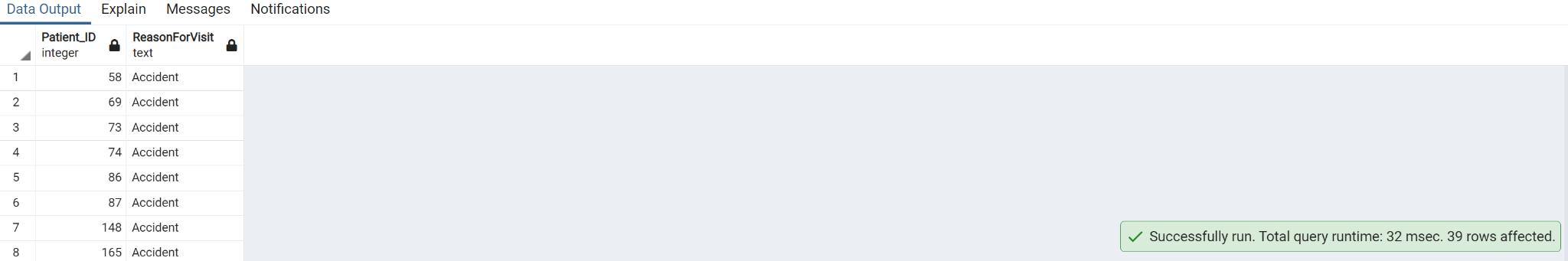
select distinct ed."Patient\_ID" ,rv."ReasonForVisit"

from public."EDVisits" ed

inner join public."ReasonForVisit" rv on rv."Rsv\_ID"=ed."Rsv\_ID"

where "ReasonForVisit"='Accident'

order by ed."Patient\_ID";



**31. Find which Visit type of patients are maximum in canceling their appointment**

select "VisitType", count(\*) As "Total\_Number\_Patients"

from public."VisitTypes" vt

inner join public."AmbulatoryVisits" a ON vt."AMVT\_ID"=a."AMVT\_ID"

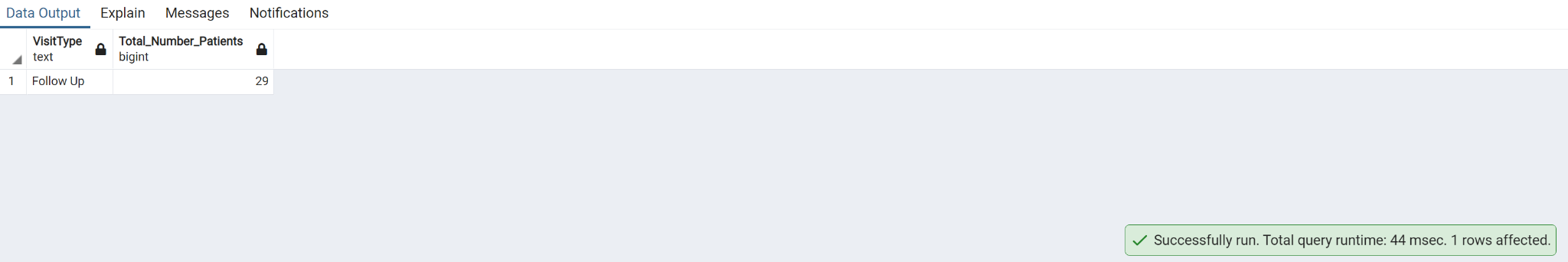
inner join public."VisitStatus"vs ON a."VisitStatus\_ID"=vs."VisitStatus\_ID"

where "VisitStatus"='Canceled'

group by "VisitType"

order by "Total\_Number\_Patients" DESC

limit 1;

****

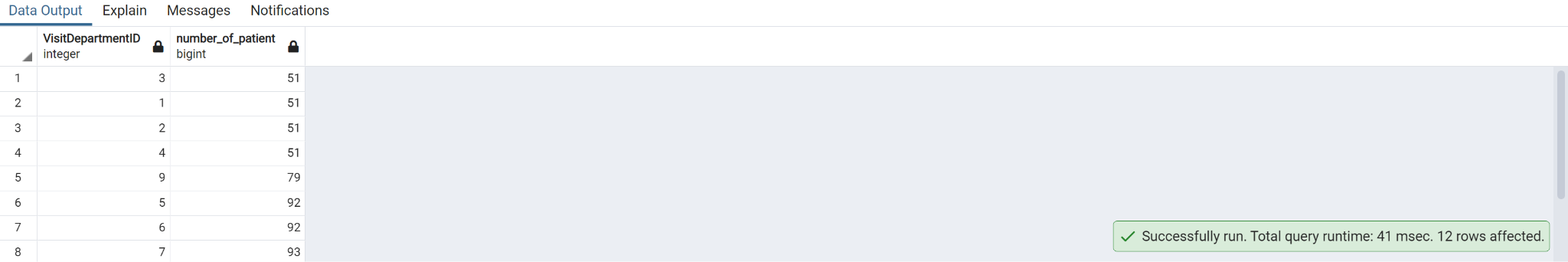
**32. Write a query to Count number of patients by VisitdepartmentID where count is greater than 50**

select "VisitDepartmentID", count(\*) as "number\_of\_patient" from public."AmbulatoryVisits"

group by "VisitDepartmentID"

having count(\*) >50

order by "number\_of\_patient";

****

**33. Write a query to get list of patient names whose visit type is new and visitdepartmentId is 2.**

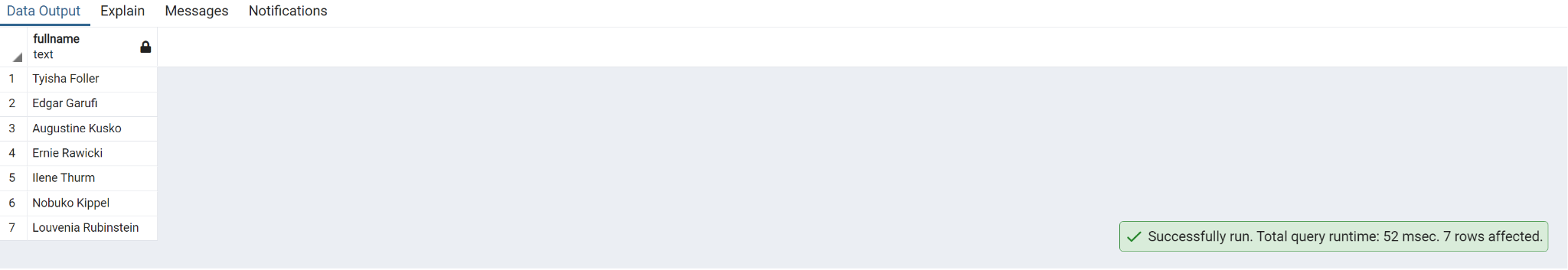
SELECT CONCAT("FirstName",' ', "LastName") As FullName

FROM public."Patients"

INNER JOIN public."AmbulatoryVisits" ON "Patients"."Patient\_ID"="AmbulatoryVisits"."Patient\_ID"

INNER JOIN public."VisitTypes" ON "AmbulatoryVisits"."AMVT\_ID"=public."VisitTypes"."AMVT\_ID"

where "VisitType"='New' and "VisitDepartmentID"=2;

****

**34. Write a query to find the most common reasons for hospital visit for patients between 50 and 60 years**

select "ReasonForVisit", count(\*) as "Number\_Of\_Visits"

from public."Patients" p

inner join public."EDVisits" ed on ed."Patient\_ID" = p."Patient\_ID"

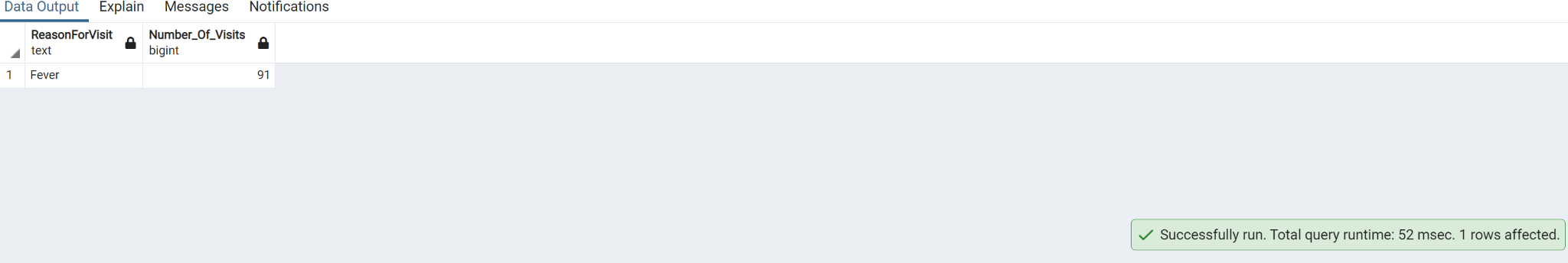
inner join public."ReasonForVisit" rv on rv."Rsv\_ID" = ed."Rsv\_ID"

where date\_part ('year', age("DateOfBirth")) >= 50 and date\_part ('year', age("DateOfBirth")) <=60

group by "ReasonForVisit"

order by "Number\_Of\_Visits" desc

limit 1;

****

**35. Get list of Patients whose gender is Male and who speak English and whose race is White**

select concat ("FirstName",' ',"LastName") as "Full\_Name","Gender", "Language", "Race"

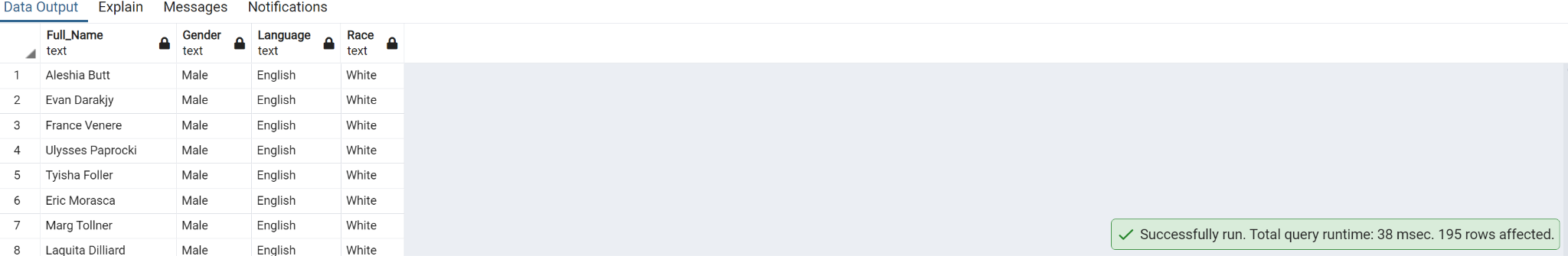
from public."Patients" p

inner join public."Gender" g on g."Gender\_ID" = p."Gender\_ID"

inner join public."Race"r on r."Race\_ID" = p."Race\_ID"

inner join public."Language" l on l."Language\_ID" = p."Language\_ID"

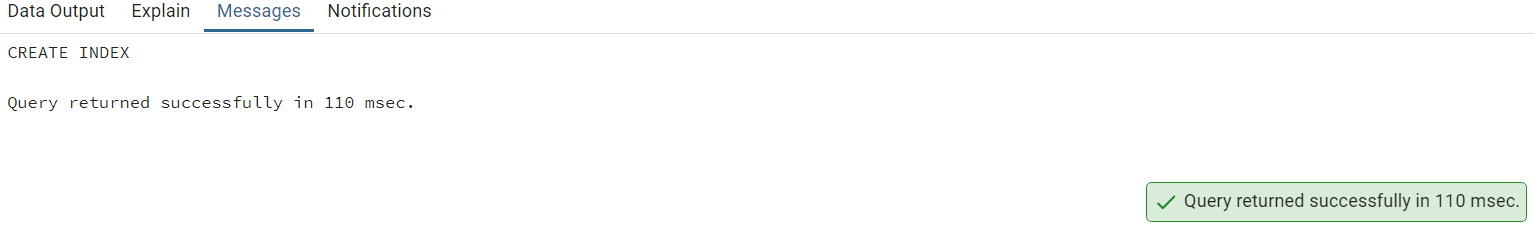
where "Gender" = 'Male' and "Language" = 'English' and "Race" = 'White';



**36. Create index on Patient table**

CREATE INDEX idx\_Patients

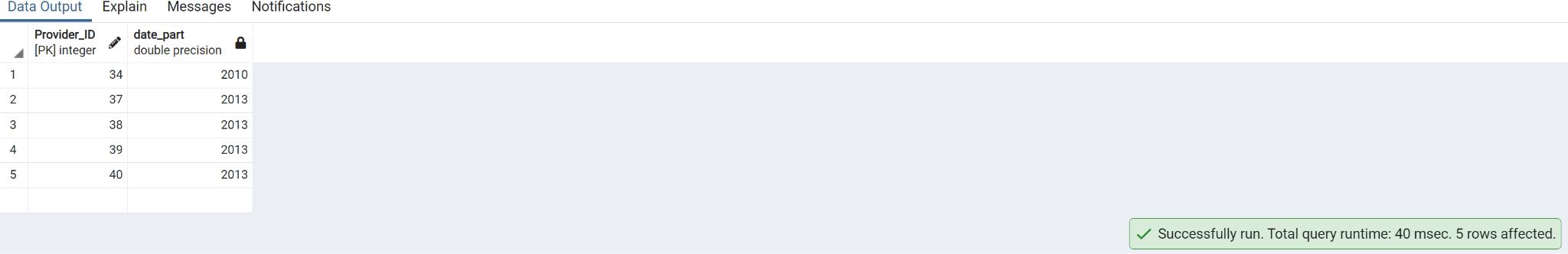
ON public."Patients" ("Patient\_ID","Language\_ID");



**37. Write a query to get list of Provider ID's where ProviderDateOnStaff year is 2013 and 2010**

select "Provider\_ID", date\_part ('year' , "ProviderDateOnStaff" ) from public."Providers"

where date\_part ('year' , "ProviderDateOnStaff" ) in (2013 , 2010);



**38. Write a query to find out percentage of Ambulatory visits by visit type.**

select "VisitType", count (\*) as "Frequency",

ROUND(

100 \* COUNT(\*) / SUM(COUNT(\*)) OVER (),

2

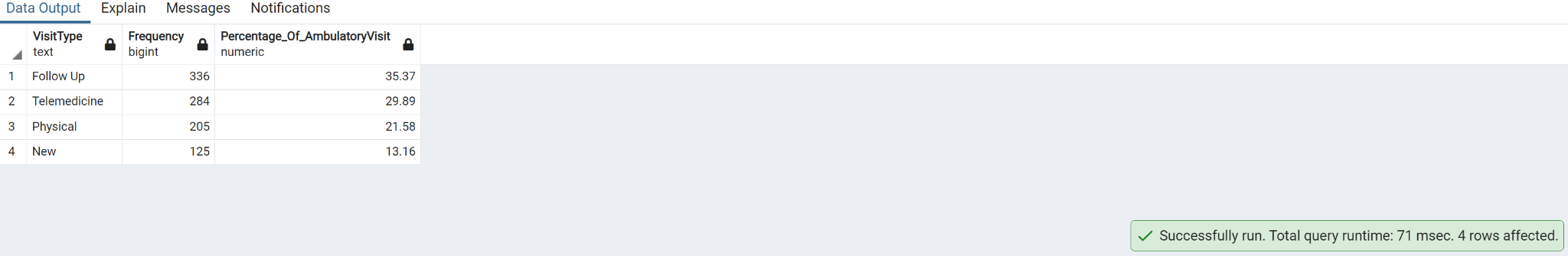
) as "Percentage\_Of\_AmbulatoryVisit"

from public."VisitTypes" v

inner join public."AmbulatoryVisits" a on v."AMVT\_ID" = a."AMVT\_ID"

group by "VisitType"

order by "Percentage\_Of\_AmbulatoryVisit" DESC;

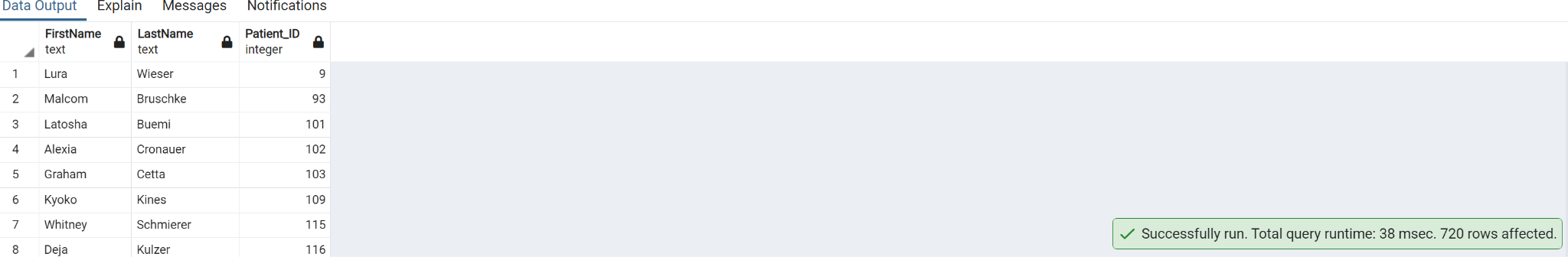


**39. Write a query to get list of patient names who has discharged.**

select p."FirstName", p."LastName", d."Patient\_ID"

from public."Patients" p

right join public."Discharges" d on p."Patient\_ID"=d."Patient\_ID";



**40. Create view on table EdVisit by selecting some columns and filter data**

**using Where condition**

CREATE VIEW "ED\_visit" AS

SELECT "EDVisit\_ID","Patient\_ID"

FROM public."EDVisits"

WHERE "Acuity" = 5;



**41. Get list of patient names whose primary diagnosis as 'Spinal Cord injury'**

**having Expected LOS is greater than 15**

select concat ("FirstName",' ',"LastName") as "Full\_Name",r."ExpectedLOS",ROUND(r."ExpectedLOS") as Length\_of\_Stay

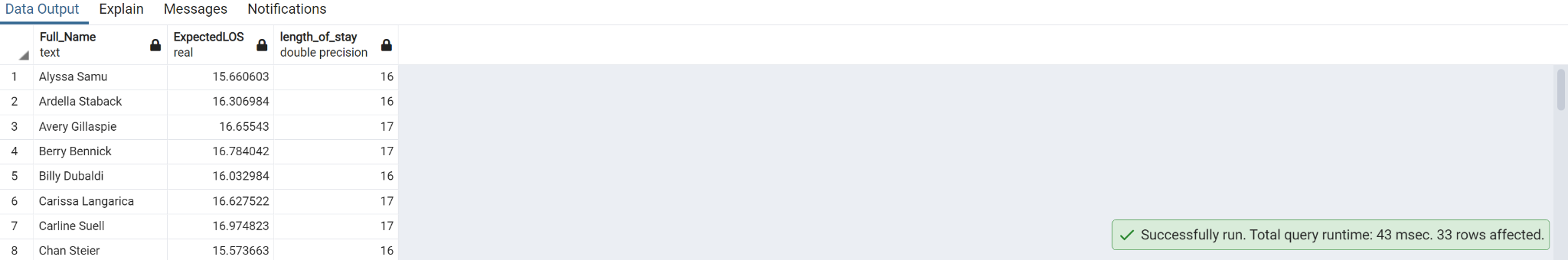
from public."Patients" p

inner join public."ReAdmissionRegistry" r on p."Patient\_ID" = r."Patient\_ID"

left join public."PrimaryDiagnosis" d on d."Diagnosis\_ID"=d."Diagnosis\_ID"

where ROUND("ExpectedLOS") > 15 and d."PrimaryDiagnosis" = 'Spinal Cord Injury'

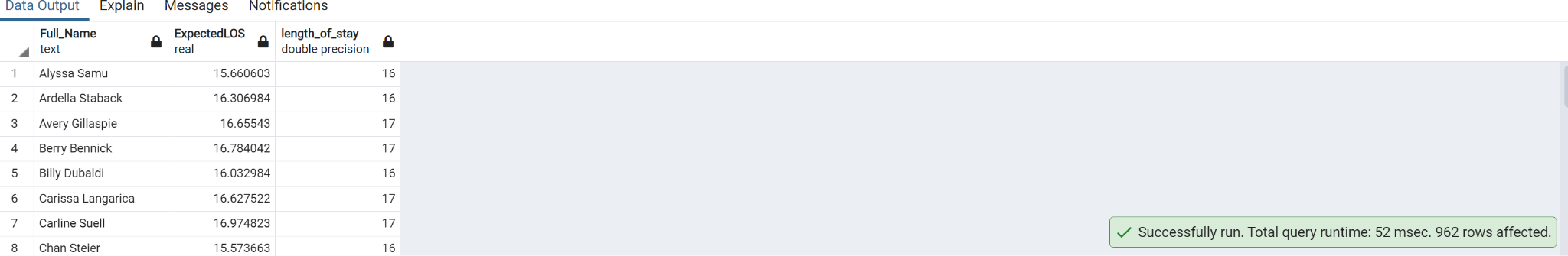
order by "Full\_Name";

****

**42. Write a query to get list of Patient names who haven't discharged**

select "FirstName", "LastName", "Discharges"."Patient\_ID" from public."Patients"

left join public."Discharges" on "Patients"."Patient\_ID"="Discharges"."Patient\_ID";

****

**43. Write a query to get list of Provider names whose ProviderSpecialty is**

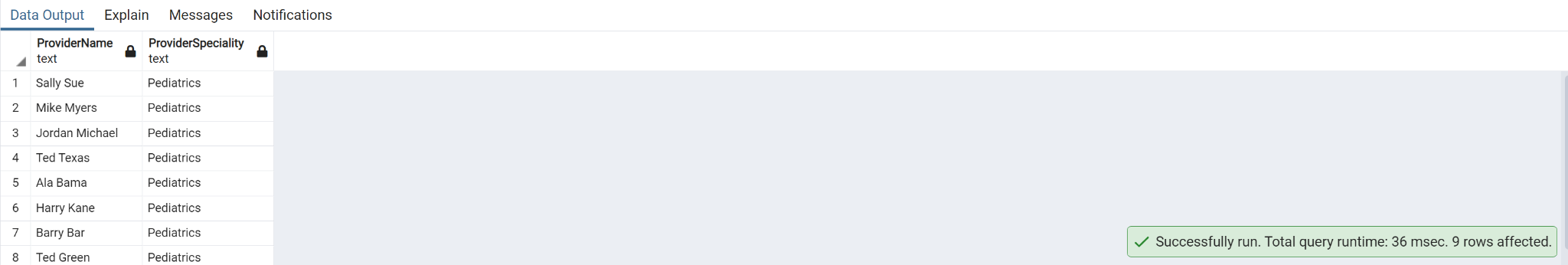
**Pediatrics.**

select p."ProviderName", ps."ProviderSpeciality"

from public."Providers" p

inner join public."ProviderSpeciality" ps on p."PS\_ID" = ps."PS\_ID"

where "ProviderSpeciality" = 'Pediatrics';

****

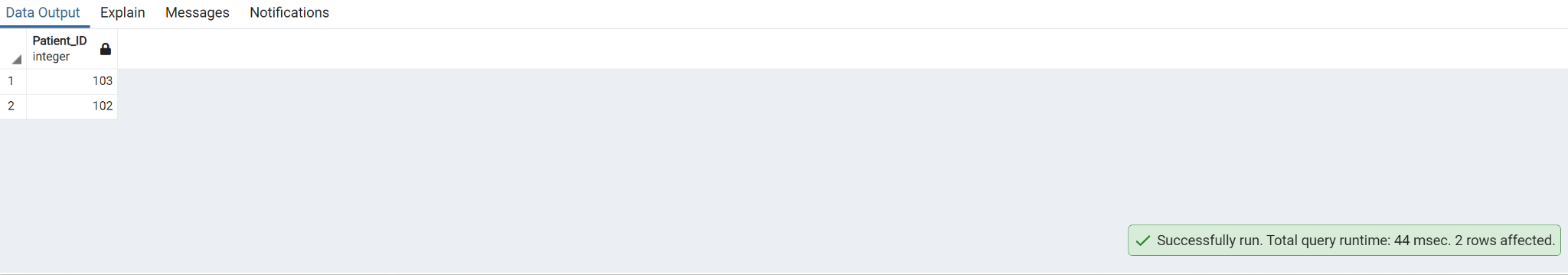
**44. Write a query to get list of patient ID's who has admitted on 1/7/2018 and**

**discharged on 1/15/2018**

select "Patient\_ID" from public."ReAdmissionRegistry"

where TO\_CHAR("DischargeDate", 'DD/MM/YYYY')= '15/01/2018'

and TO\_CHAR("AdmissionDate", 'DD/MM/YYYY')= '07/01/2018';



**45. Write a query to find outpatients vs inpatients by monthwise (hint:**

**consider readmission/discharges and ambulatory visits table for inpatients**

**and outpatients)**

select "month\_name","monthnum", max(case when (type='Inpatients') then "total\_patients" else 0 end) as Inpatients,

max(case when (type='Outpatients') then total\_patients else 0 end) as Outpatients

from (

select 'Inpatients' as type,EXTRACT(MONTH FROM "DischargeDate") as MonthNum, to\_char("DischargeDate", 'month') as month\_name, count("Patient\_ID") as Total\_patients

from public."Discharges"

group by EXTRACT(MONTH FROM "DischargeDate") , to\_char("DischargeDate", 'month')

union

select 'Outpatients' as type,EXTRACT(MONTH FROM "DateofVisit") as MonthNum, to\_char("DateofVisit", 'month') as month\_name, count("Patient\_ID") as Total\_patients

from public."AmbulatoryVisits"

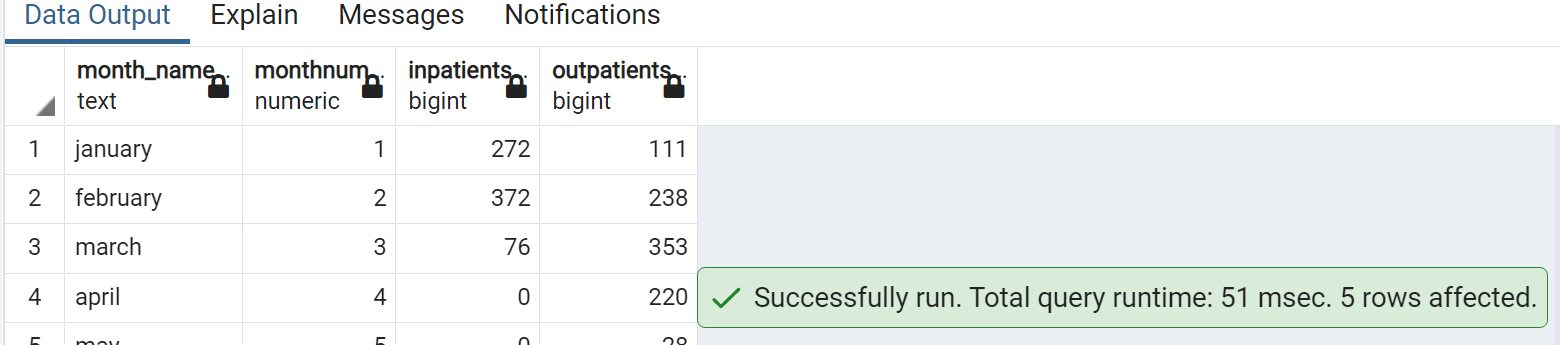
group by EXTRACT(MONTH FROM "DateofVisit") ,to\_char("DateofVisit", 'month')

--order by type, month\_name

) a

group by "monthnum","month\_name"

order by "monthnum";



**46. Write a query to get list of Number of Ambulatory Visits by Provider**

**Speciality per month**

WITH cte\_provider AS (

SELECT "ProviderSpeciality","Provider\_ID"

FROM public."ProviderSpeciality"

INNER JOIN public."Providers" on "ProviderSpeciality"."PS\_ID"="Providers"."PS\_ID"

)

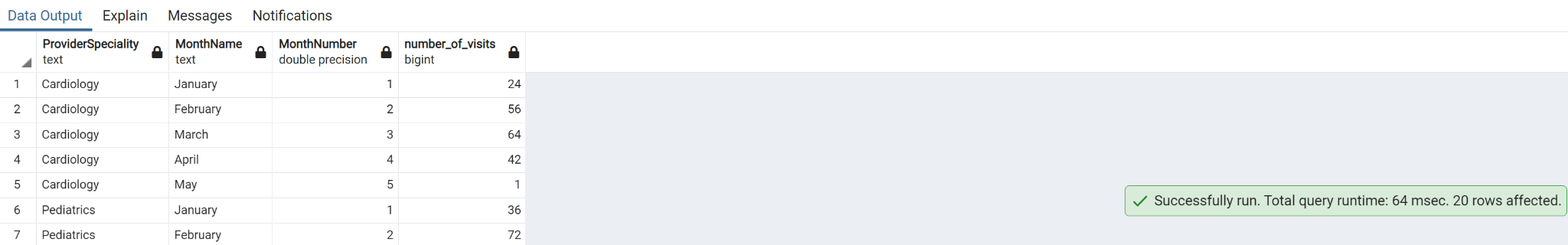
SELECT "ProviderSpeciality",TO\_CHAR("DateofVisit", 'Month') AS "MonthName",date\_part('month',"DateofVisit") AS "MonthNumber",COUNT(\*) AS number\_of\_visits

FROM public."AmbulatoryVisits"

LEFT JOIN cte\_provider USING("Provider\_ID")

GROUP BY "ProviderSpeciality","MonthName","MonthNumber"

ORDER BY "ProviderSpeciality","MonthNumber";



**47. Write a query to find Average age for admission by service**

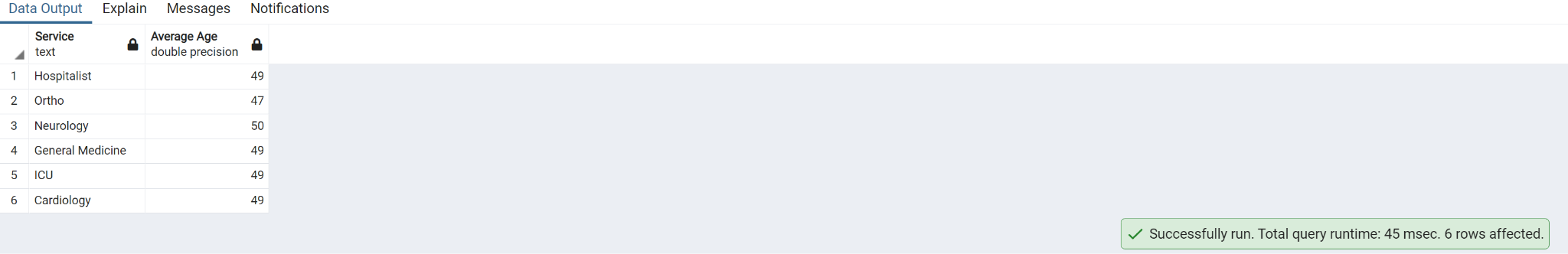
select s."Service", ROUND(AVG(date\_part('year', age("DateOfBirth")))) as "Average Age"

from "ReAdmissionRegistry" a

join "Patients" p on p."Patient\_ID" = a."Patient\_ID"

join "Service" s ON s."Service\_ID" = a."Service\_ID"

group by s."Service\_ID";

****

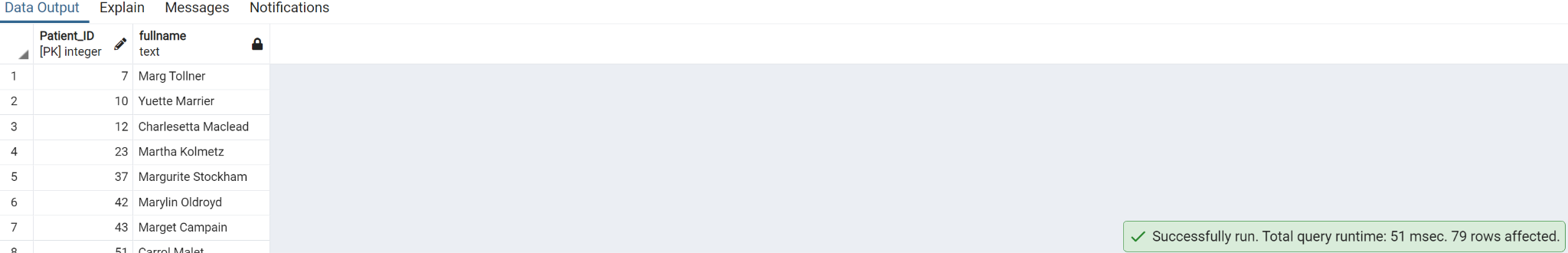
**48. Write a query to get list of patient with their full names whose names**

**contains "Ma"**

select "Patient\_ID",CONCAT("FirstName",' ', "LastName") as "Full\_Name"

from public."Patients"

where CONCAT("FirstName",' ', "LastName") like '%Ma%';



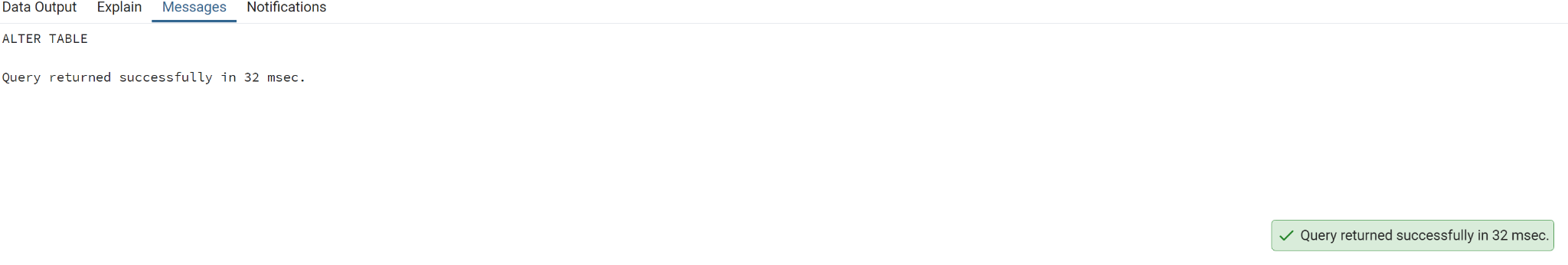
**49. Update Visit Timestamp column in EDVisits table by selecting data type as**

**timestamp with timezone**

ALTER TABLE public."EDVisits"

ALTER COLUMN "VisitTimestamp"

SET DATA TYPE timestamp with time zone;

****

**50. Write a create a trigger function on AmbulatoryVisits by selecting any two**

**Columns.**

CREATE FUNCTION trigger\_function()

RETURNS TRIGGER

LANGUAGE PLPGSQL

AS $$

BEGIN

IF NEW."DateofVisit" < '2018-11-09' and "VisitDepartmentID" = 10 THEN

update public."AmbulatoryVisits" set "BloodPressureSystolic"='0';

END IF;

RETURN NEW;

END;

$$

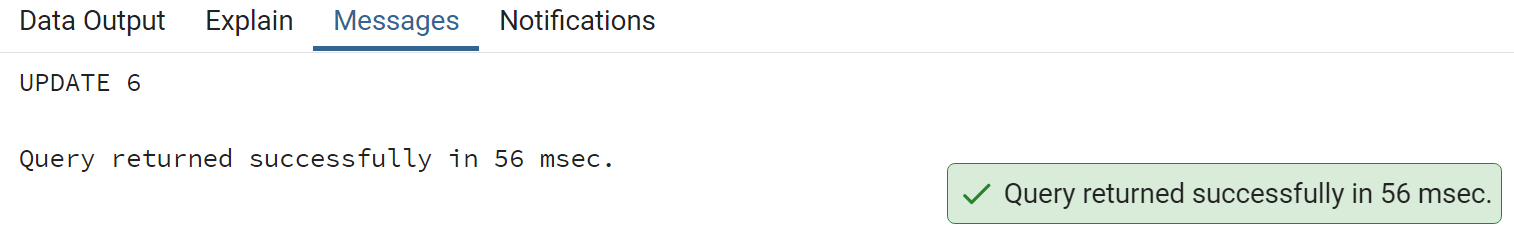
**51. Insert number of days for Readmission in DaysToReadmission Column for**

**patient ID's from 737 to 742(use any random value)**

update "ReAdmissionRegistry"

set "DaysToReadmission" = floor(random() \* 9 + 1)

where "Patient\_ID" >=737 and "Patient\_ID" <= 742;



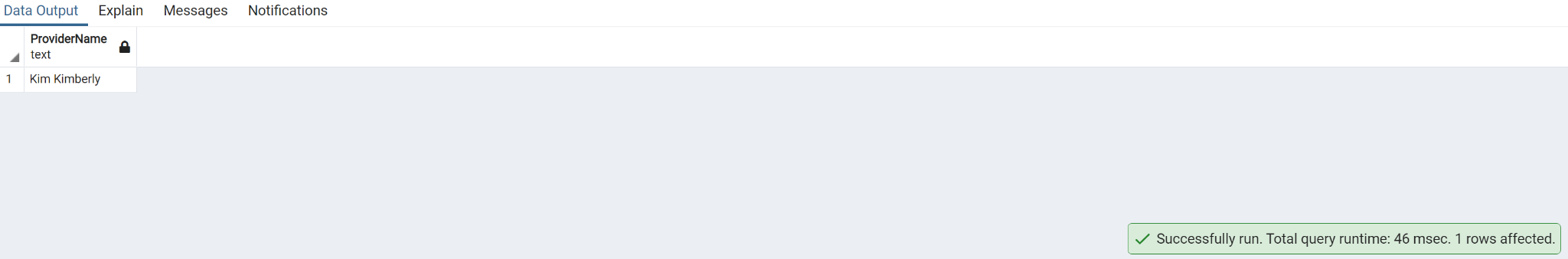
**52. Get list of Provider names whose name is starting with K and ending with y**

**(Hint:K-Upper, Y-Lower)**

SELECT "ProviderName"

FROM public."Providers"

WHERE INITCAP("ProviderName") like 'K%y';



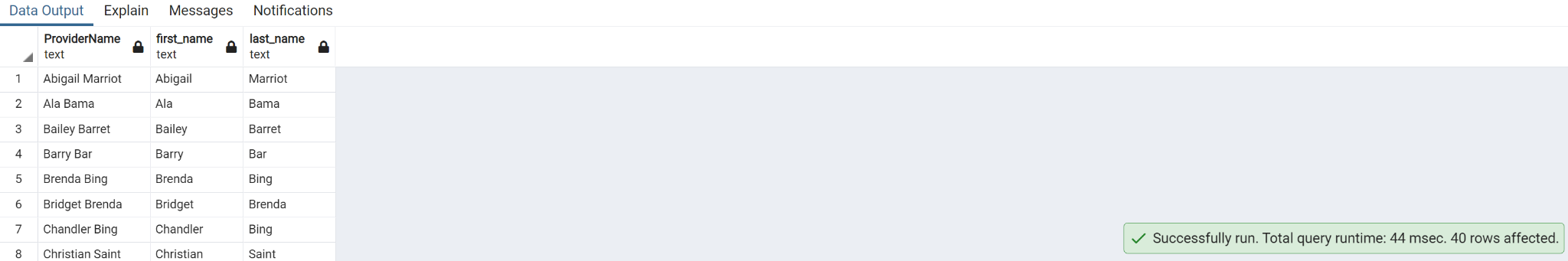
**53. Write a query to Split provider First name and Last name into different**

**Column**

select "ProviderName",split\_part("ProviderName" ,' ',1) as First\_name, split\_part("ProviderName" ,' ',2) as Last\_name

from public."Providers"

order by "ProviderName";

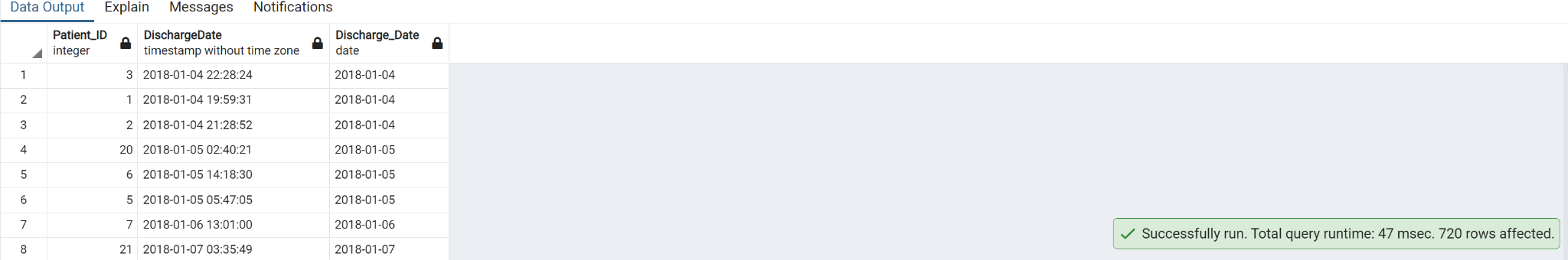


**54. Get list of Patient ID's order by Discharge date**

select "Patient\_ID","DischargeDate",TO\_DATE(TO\_CHAR("DischargeDate", 'YYYY-MM-DD'),'YYYY-MM-DD') AS "Discharge\_Date"

from public."Discharges"

order by "Discharge\_Date";



**55. Write a query to drop View by creating view on table Discharge by selecting**

**Columns**

create view "Patient\_Discharge" as

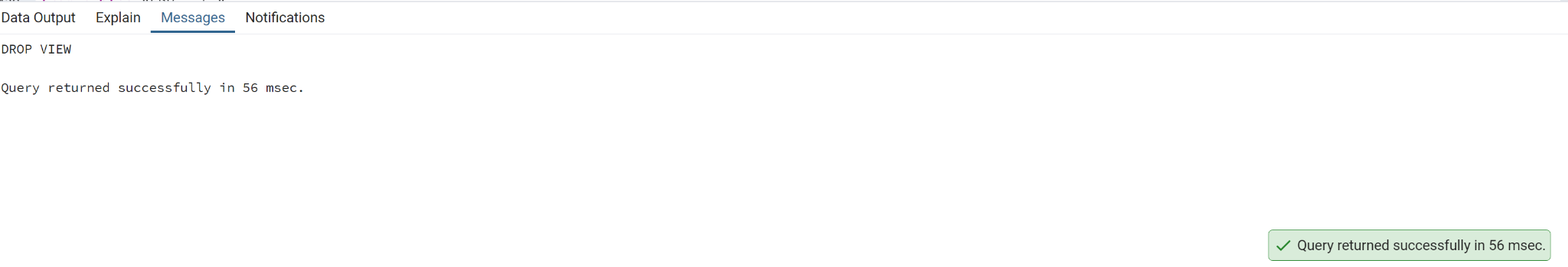
select "Patient\_ID","AdmissionDate","DischargeDate"

from public."Discharges"

where "Patient\_ID" < 100

--select \* from "Patient\_Discharge"

drop view "Patient\_Discharge"

****

**56. Write a query to get list of Patient ID's where Visitdepartment ID is 1 and**

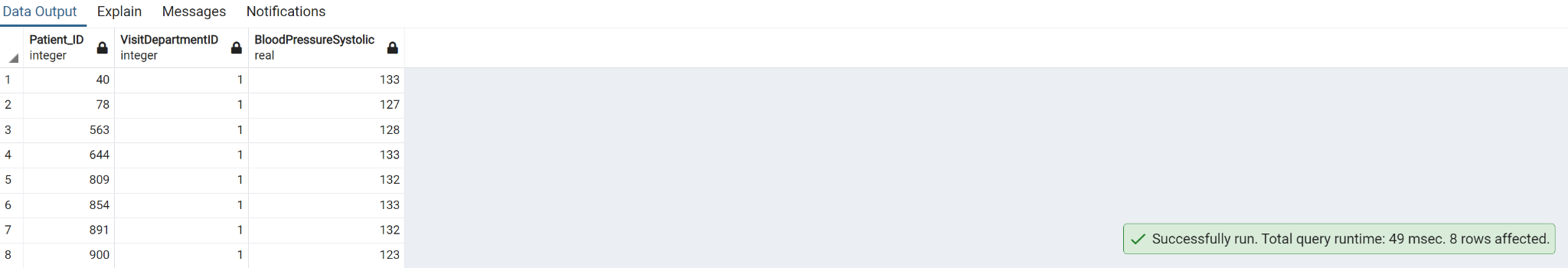
**BloodPressureSystolic is between 123 to 133**

select "Patient\_ID","VisitDepartmentID","BloodPressureSystolic"

from public."AmbulatoryVisits"

where "VisitDepartmentID"=1 and "BloodPressureSystolic" between 123 and 133

order by "Patient\_ID";

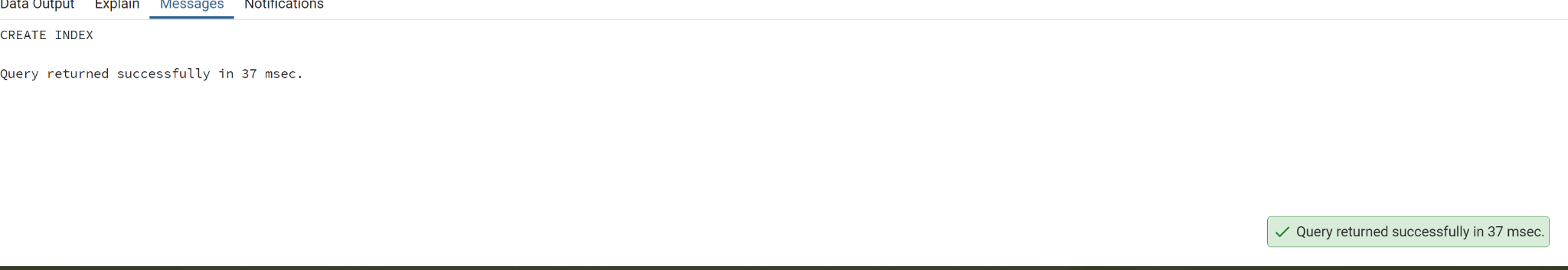


**57. Write the query to create Index on table ReasonForVisit by selecting a**

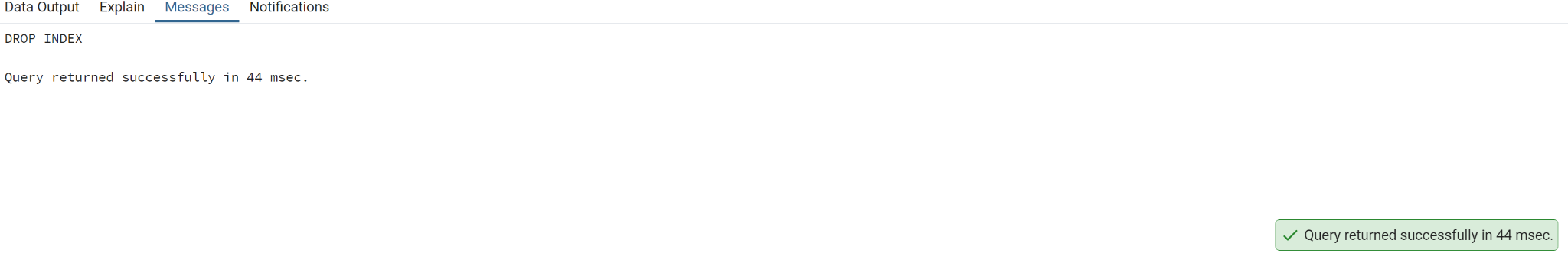
**column and also write the query drop same index**

create index ReasonForVisit\_index 1

on public."ReasonForVisit"("ReasonForVisit");



**drop index ReasonForVisit\_index;**



**58. Write a query to Count number ofunique patients EDDisposition wise.**

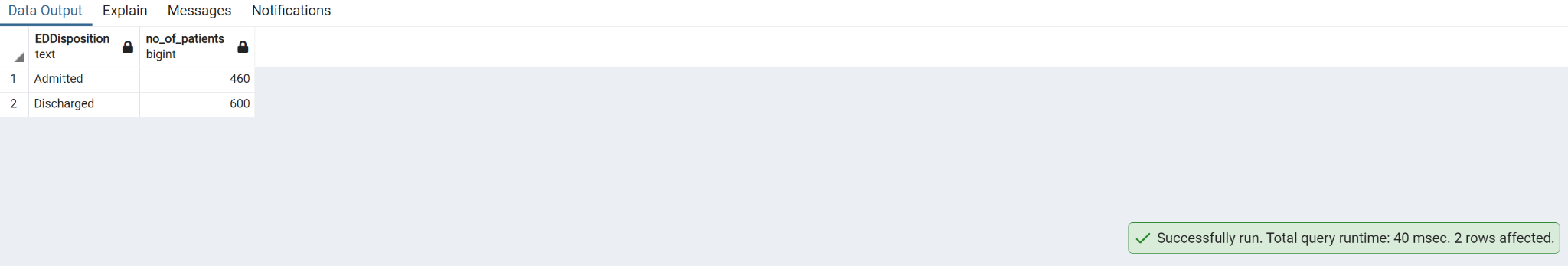
select "EDDisposition",count(distinct "Patient\_ID") as no\_of\_patients

from public."EDVisits" e

inner join public."EDDisposition" ed on e."EDD\_ID"=ed."EDD\_ID"

group by "EDDisposition"

order by no\_of\_patients;



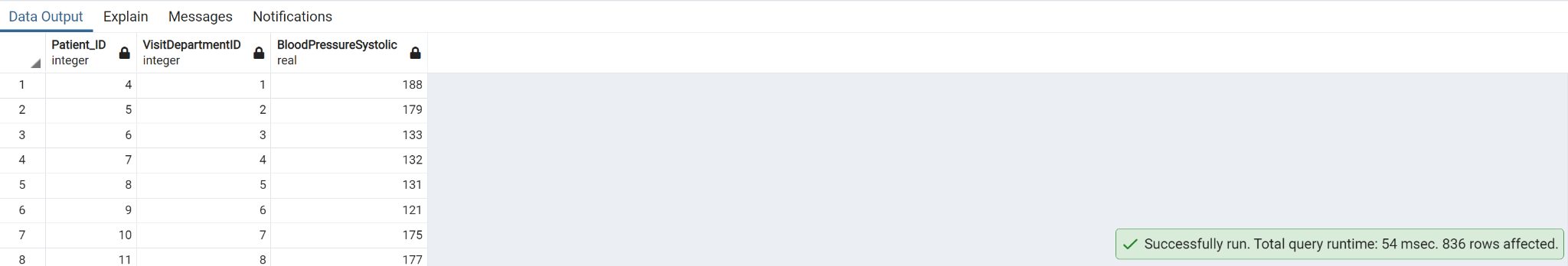
**59. Write a query to get list of Patient ID's whree Visitdepartment ID is 5 or**

**BloodPressureSystolic is NOT NULL**

select "Patient\_ID","VisitDepartmentID","BloodPressureSystolic"

from public."AmbulatoryVisits"

where "VisitDepartmentID"=5 or "BloodPressureSystolic" is not null;



**60. Query to find the number of patients readmitted by Service**

select tbl2."Service", count (distinct tbl1."Patient\_ID") as No\_Of\_Patients

from public."ReAdmissionRegistry" as tbl1

inner join public."Service" as tbl2 on tbl1."Service\_ID"=tbl2."Service\_ID"

group by 1

order by 1;



**61. Write a query to list male patient ids and their names who are above 40**

**years of age and less than 60 years and have BloodPressureSystolic above**

**120 and BloodPressureDiastolic above 80**

select a."Patient\_ID",p."FirstName",p."LastName",date\_part('year', age("DateOfBirth")) AS "Age"

from public."Gender" g

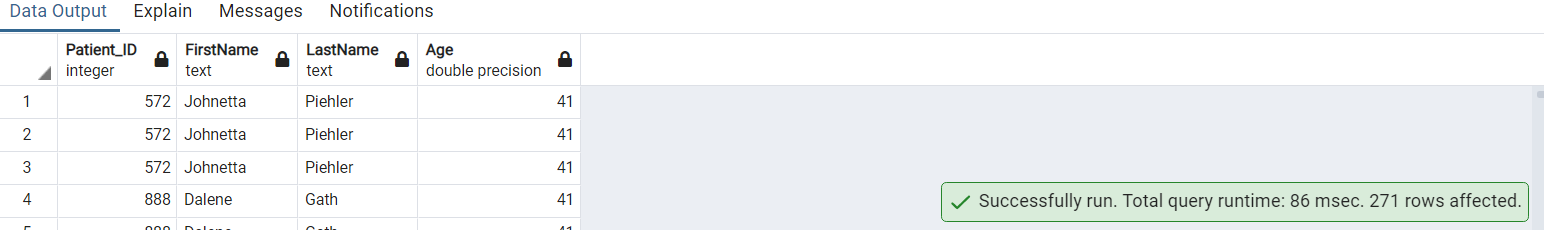
inner join public."Patients" p on p."Gender\_ID"=g."Gender\_ID"

right join public."AmbulatoryVisits" a on p."Patient\_ID"= a."Patient\_ID"

where "Gender" ='Male' and (date\_part ('year',age("DateOfBirth")) >40 and date\_part ('year',age("DateOfBirth"))<60)

AND "BloodPressureSystolic" > 120 and "BloodPressureSystolic" > 80

ORDER BY "Age";



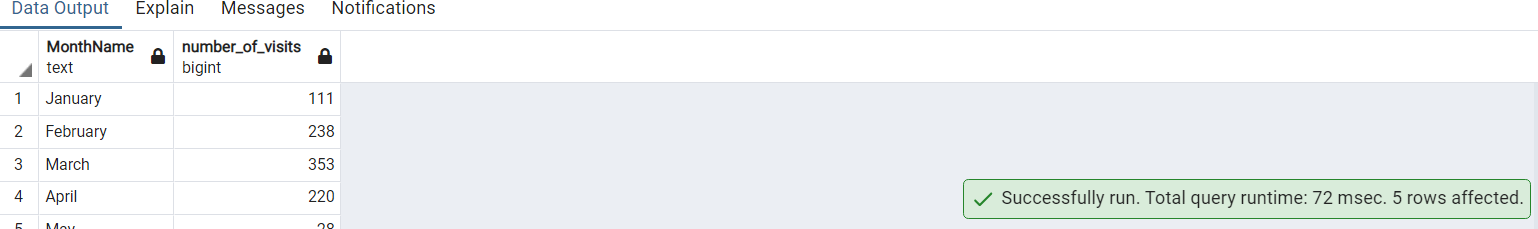
**.62 Query to find the number of out patients who have visited month wise(use month names)**

SELECT TO\_CHAR("DateofVisit", 'Month') AS "MonthName",COUNT(\*) AS out\_patient

FROM public."AmbulatoryVisits"

GROUP BY "MonthName",date\_part('month',"DateofVisit")

ORDER BY date\_part('month',"DateofVisit");



**63. Write a query to get list of patient ID's whose BloodPressureSystolic is**

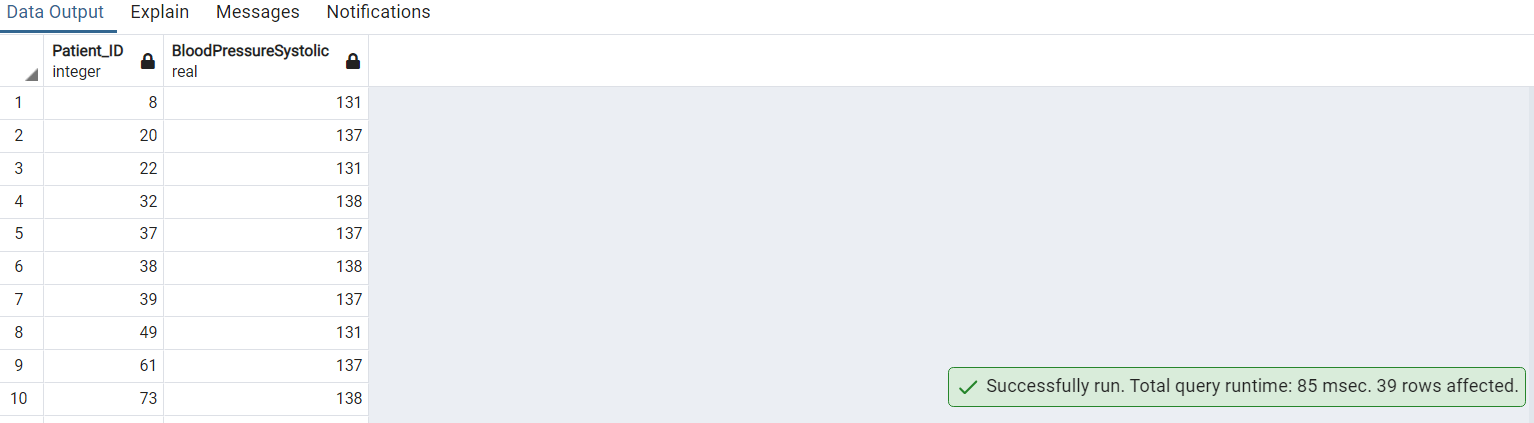
**131,137,138**

select "Patient\_ID", "BloodPressureSystolic"

from public."AmbulatoryVisits"

where "BloodPressureSystolic" in (131, 137,138)

order by "Patient\_ID";

****

**64. Query to classify expected LOS into 3 categories as per the duration. (Hint:**

**Use of CASE statement)**

with cte\_duration as (

SELECT "Patient\_ID","ExpectedLOS",

CASE

WHEN "ExpectedLOS" <=6 THEN 'Short'

WHEN "ExpectedLOS" <=12 THEN 'Medium'

WHEN "ExpectedLOS" <=17 THEN 'Long'

END "Duration"

FROM public."Discharges"

ORDER BY "ExpectedLOS"

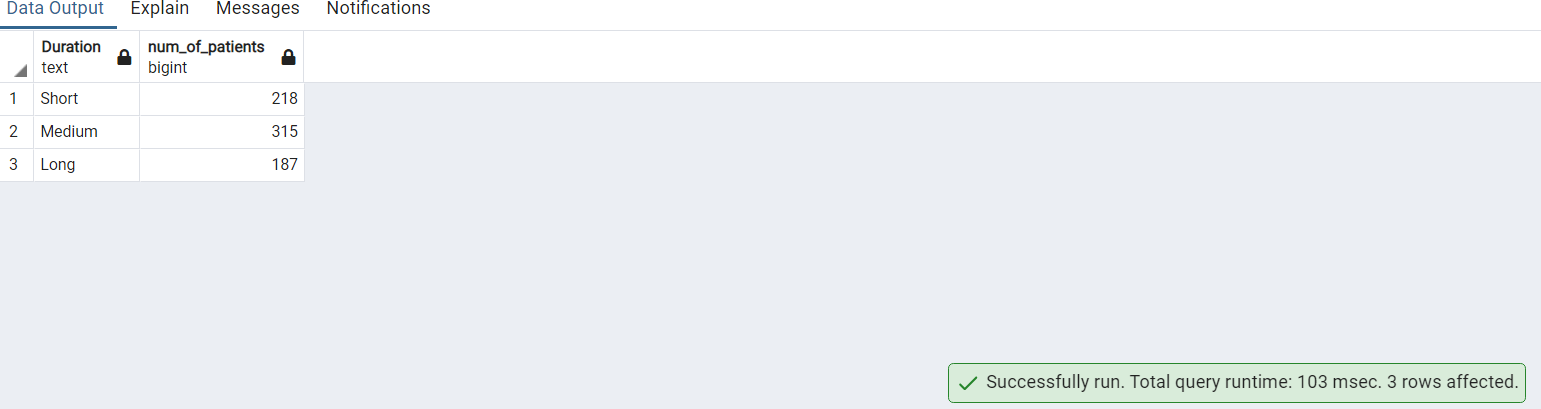
)

select "Duration", count (\*) as num\_of\_patients

from cte\_duration

group by "Duration"

order by "Duration" DESC;

****

**65. Write a query to create a table to list the names of patients whose date of**

**birth is later than 1st jan 1960.Name the table as “Persons”**

CREATE TABLE "Persons" AS

SELECT

"FirstName",

"LastName",

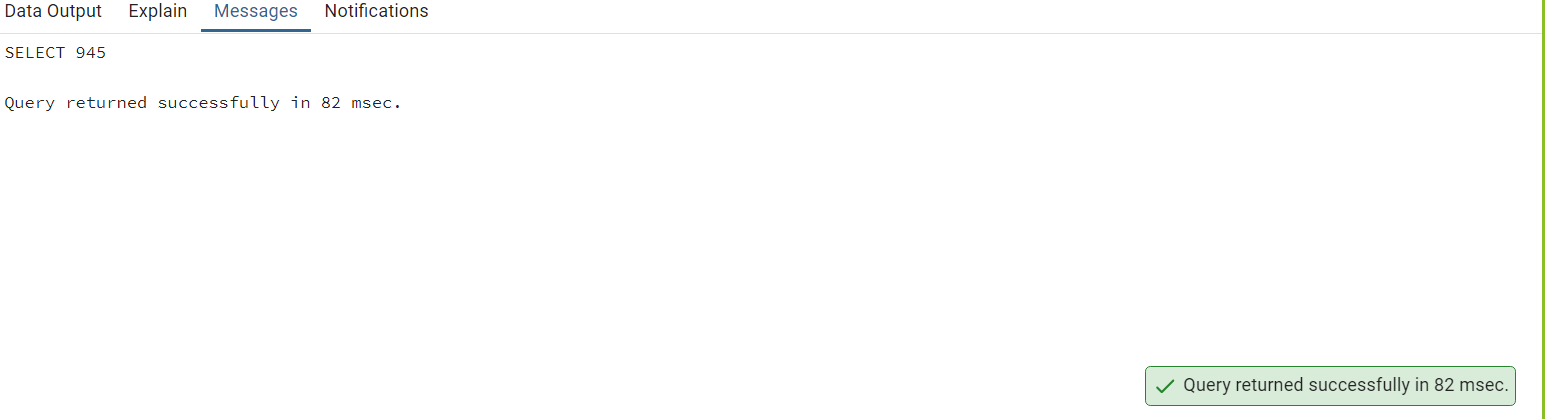
"DateOfBirth"

FROM

public."Patients"

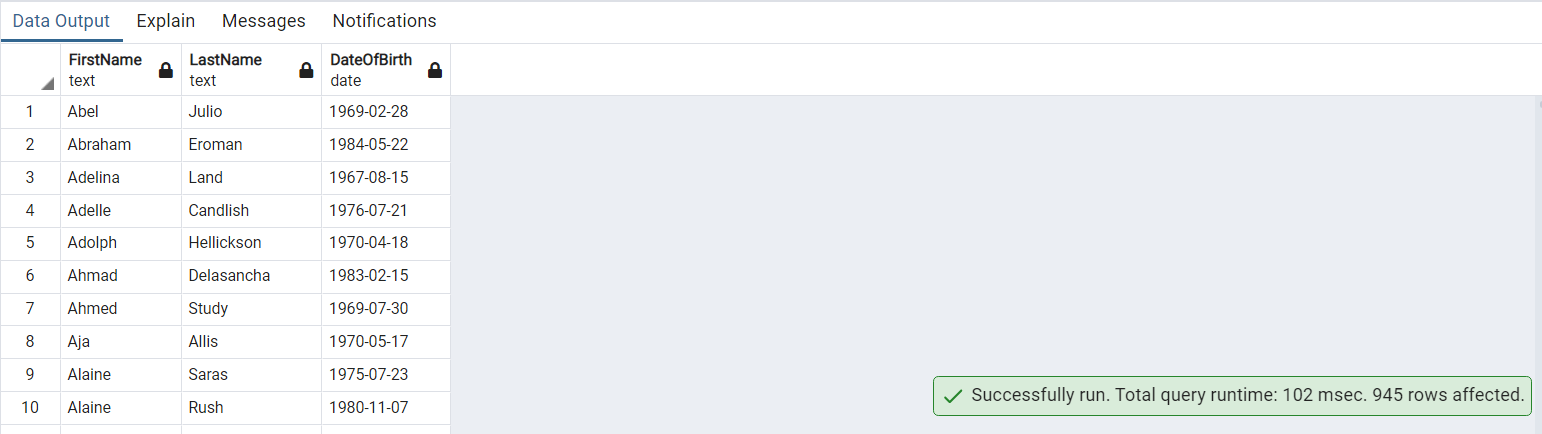
WHERE

"DateOfBirth" > '1960-01-01';



select \* from "Persons"

order by "FirstName";



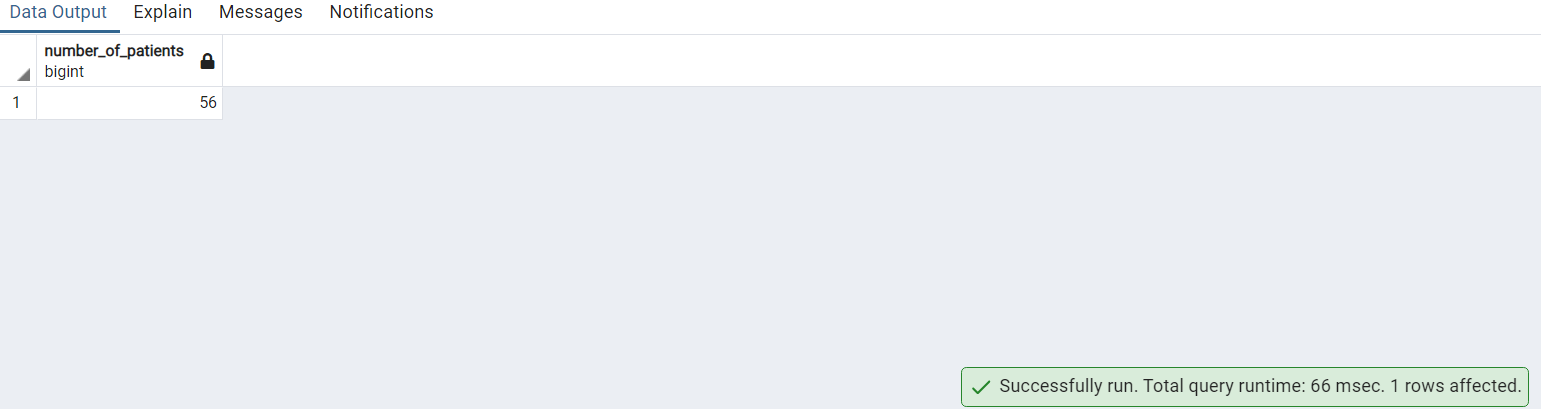
**66. Write a query to Count number of patients who has discharged after**

**march3rd 2018**

select count(\*) as number\_of\_patients

from public."Discharges"

where "DischargeDate" > '2018-03-03';

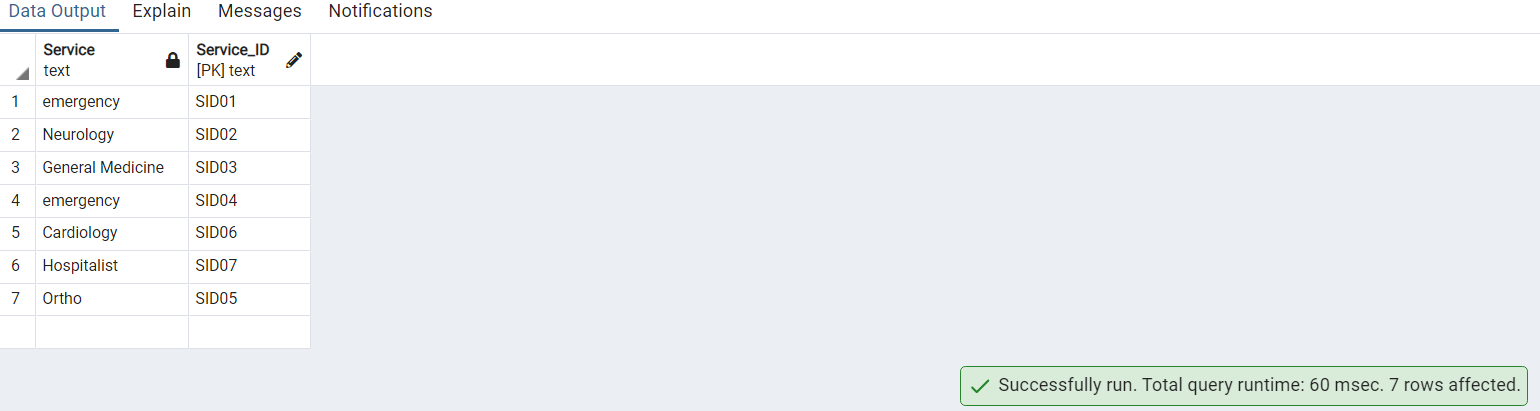


**67. Replace ICU with emergency (Hint: Do not update or alter the table)**

SELECT

case when "Service" = 'ICU' then 'emergency' else "Service" end as "Service","Service\_ID"

from public."Service";

****

**68. Write a query to get Sum of ExpectedLOS for Service\_ID 'SID01'**

select "Service\_ID", ROUND(sum ("ExpectedLOS")) as "Total\_ExpectedLos"

from public."ReAdmissionRegistry"

where "Service\_ID" = 'SID01'

group by "Service\_ID";

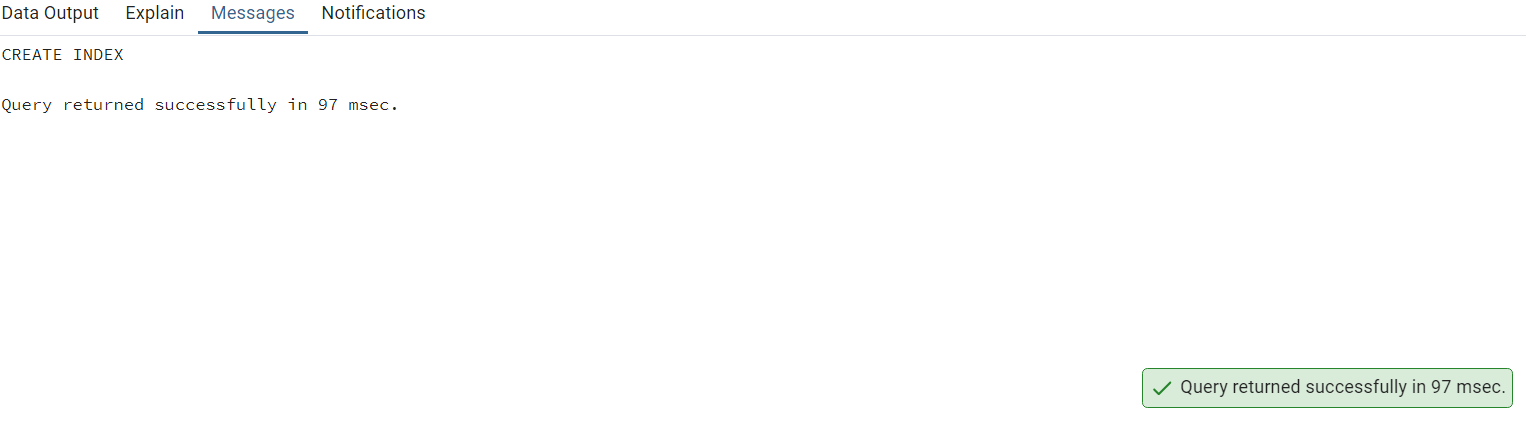
****

**69. Create index on table Provider by selecting a column and filter by using**

**WHERE condition**

create index idx\_provider on public."Providers" ("Provider\_ID")

where "Provider\_ID" = 1;



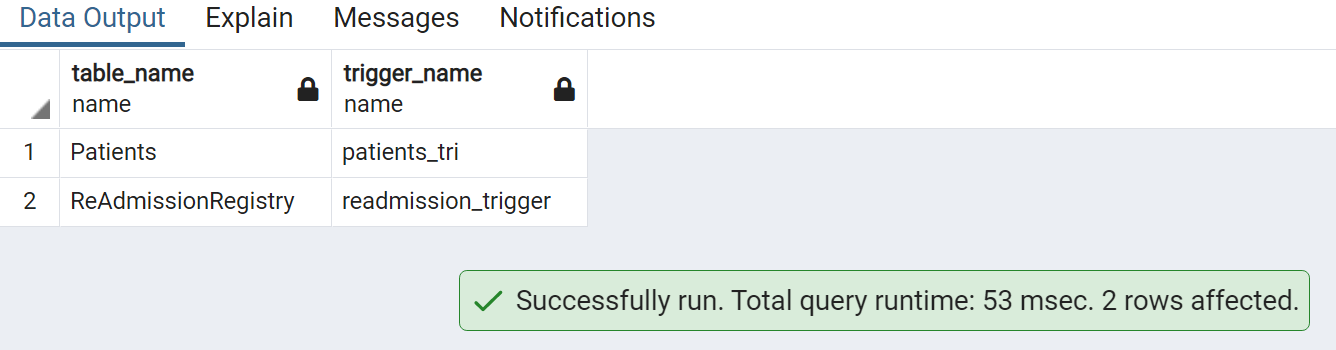
**70. List down all triggers in our HealthDB database**

SELECT event\_object\_table AS table\_name ,trigger\_name

FROM information\_schema.triggers

GROUP BY table\_name , trigger\_name

ORDER BY table\_name ,trigger\_name



**71. Partition the table according to Service\_ID and use windows function to**

**calculate percent rank. Order by ExpectedLOS.**

select "Service\_ID" , "ExpectedLOS",

ROUND(

(PERCENT\_RANK() OVER (

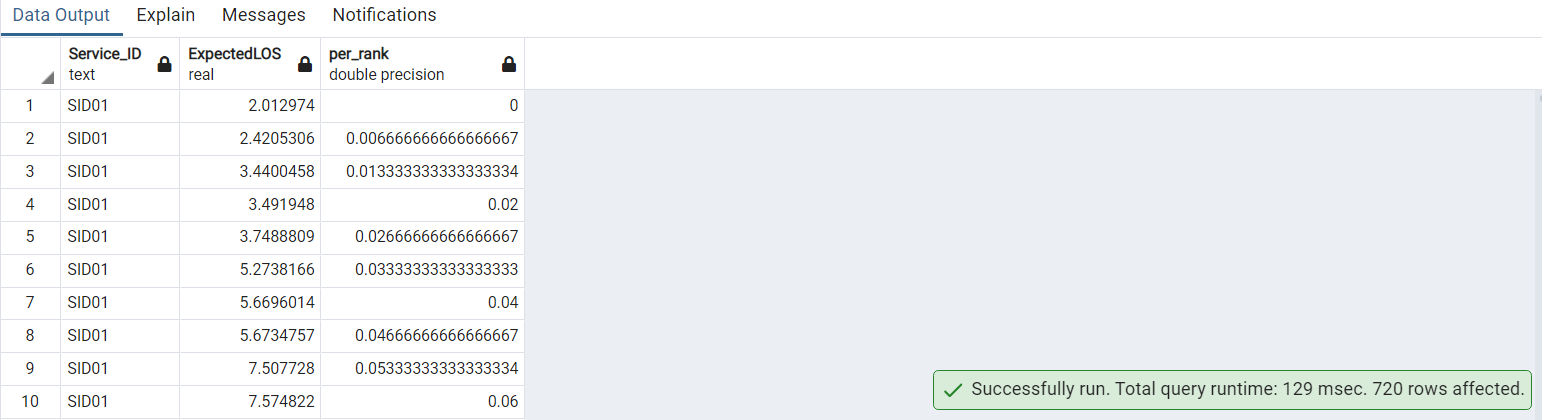
PARTITION BY "Service\_ID"

ORDER BY "ExpectedLOS"

))::NUMERIC, 5

)as percent\_rank

from public."ReAdmissionRegistry"



**72. Write a query by using common table expressions and case statements to**

**display birthyear ranges**

with cte as (

select "Patient\_ID","DateOfBirth",

extract ('year' from "DateOfBirth") as birth\_year,

case when extract ('year' from "DateOfBirth") between 1960 and 1969 then '1960-1969'

when extract ('year' from "DateOfBirth") between 1970 and 1979 then '1970-1979'

when extract ('year' from "DateOfBirth") between 1980 and 1990 then '1980-1990'

end as birth\_year\_range

from public."Patients"

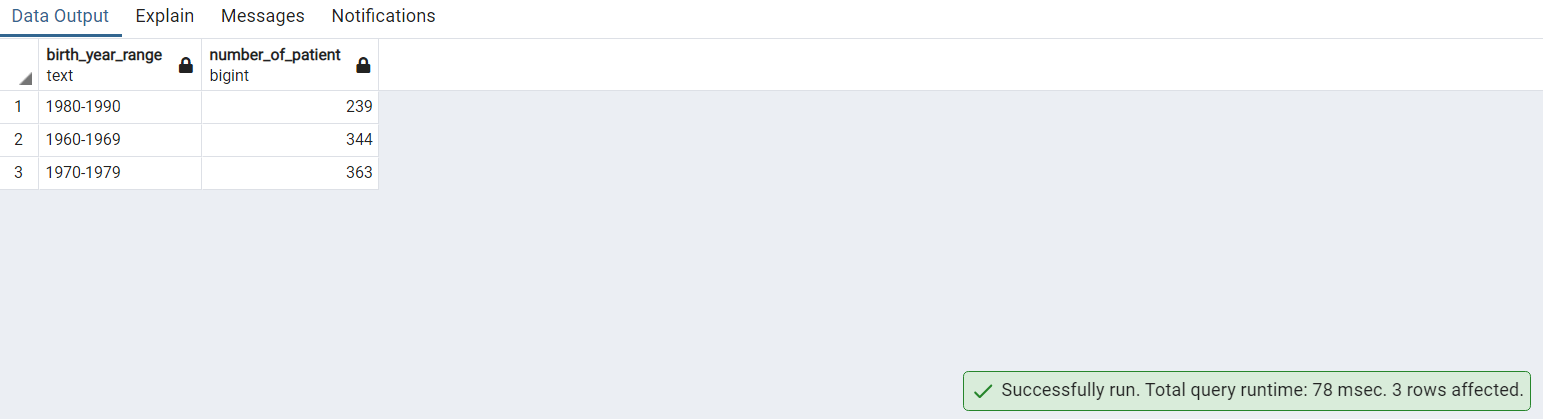
order by birth\_year

)

select birth\_year\_range, count(\*) as number\_of\_patient from cte

group by birth\_year\_range

order by number\_of\_patient;

****

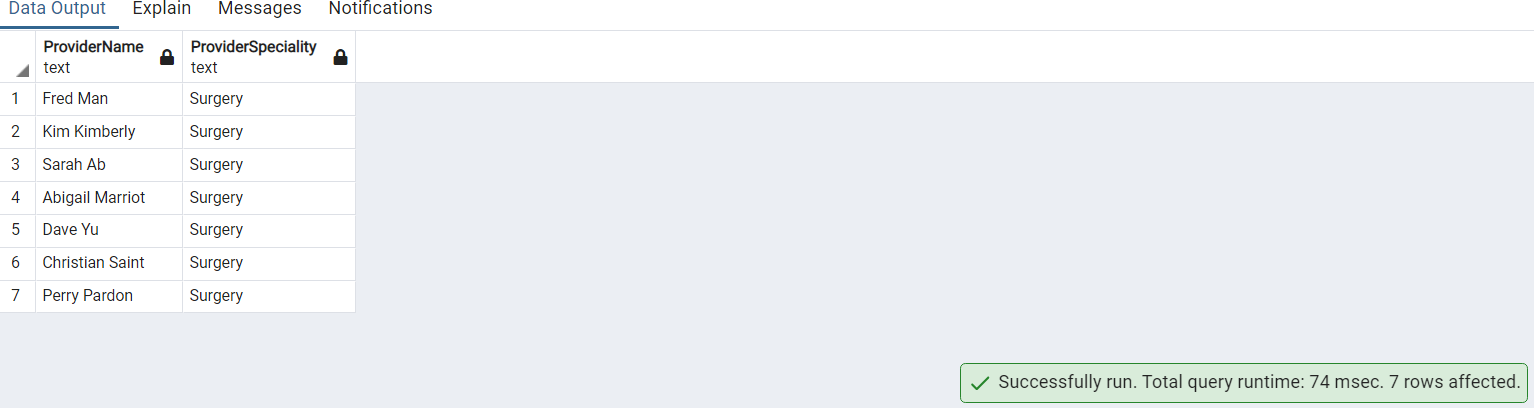
**73. Get list of Provider names whose ProviderSpeciality is Surgery**

select p."ProviderName",ps. "ProviderSpeciality"

from public."Providers" p

inner join public."ProviderSpeciality" ps on p."PS\_ID" = ps."PS\_ID"

where "ProviderSpeciality" = 'Surgery';

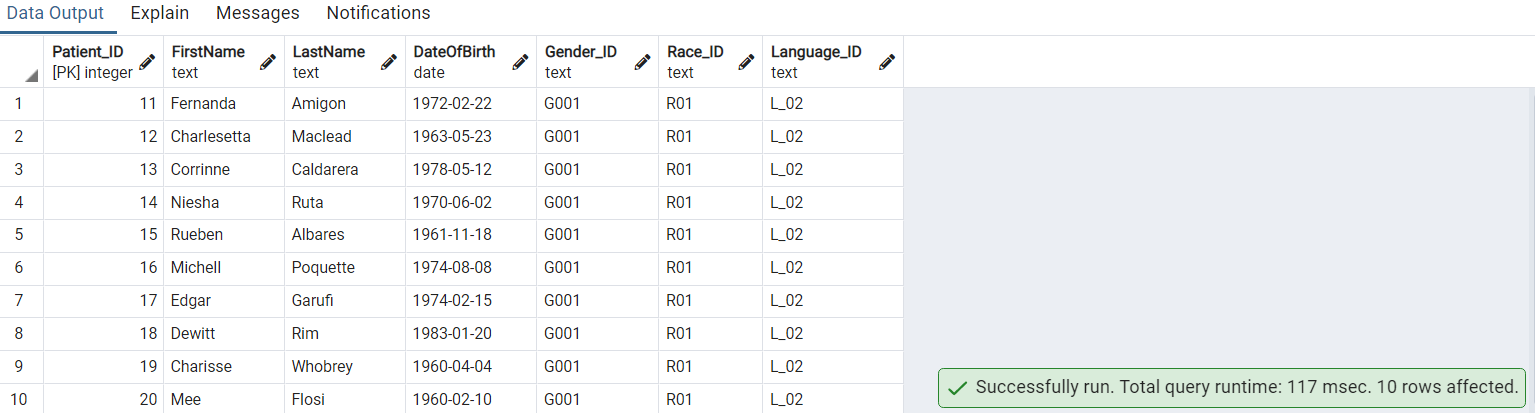
****

**74. List of patient from rows 11-20 without using where condition.**

select \* from public."Patients"

OFFSET 10 ROWS

FETCH FIRST 10 ROW ONLY



**75. Give a query how to find triggers from table AmbulatoryVisits**

SELECT event\_object\_table AS table\_name ,trigger\_name

FROM information\_schema.triggers

where event\_object\_table = 'AmbulatoryVisits'

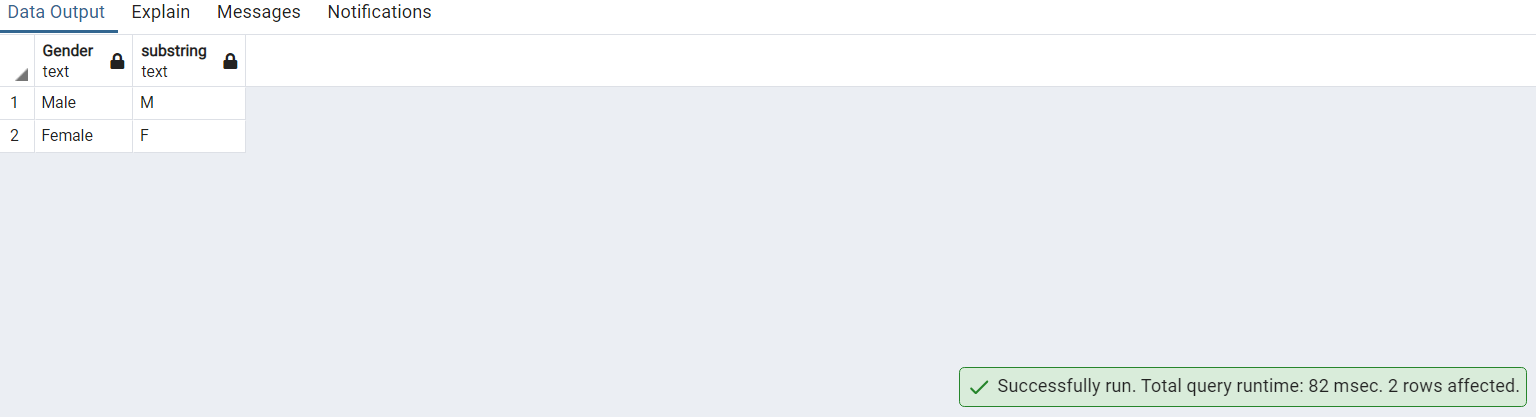
GROUP BY table\_name , trigger\_name

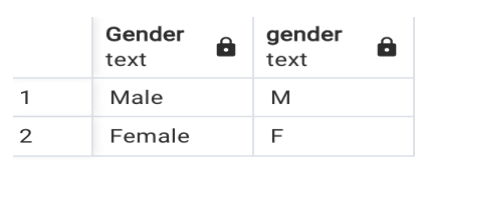
ORDER BY table\_name ,trigger\_name

****

**76. Recreate the below expected output using Substring.**

select "Gender", substring("Gender",1,1) as gender from public."Gender**";**

****

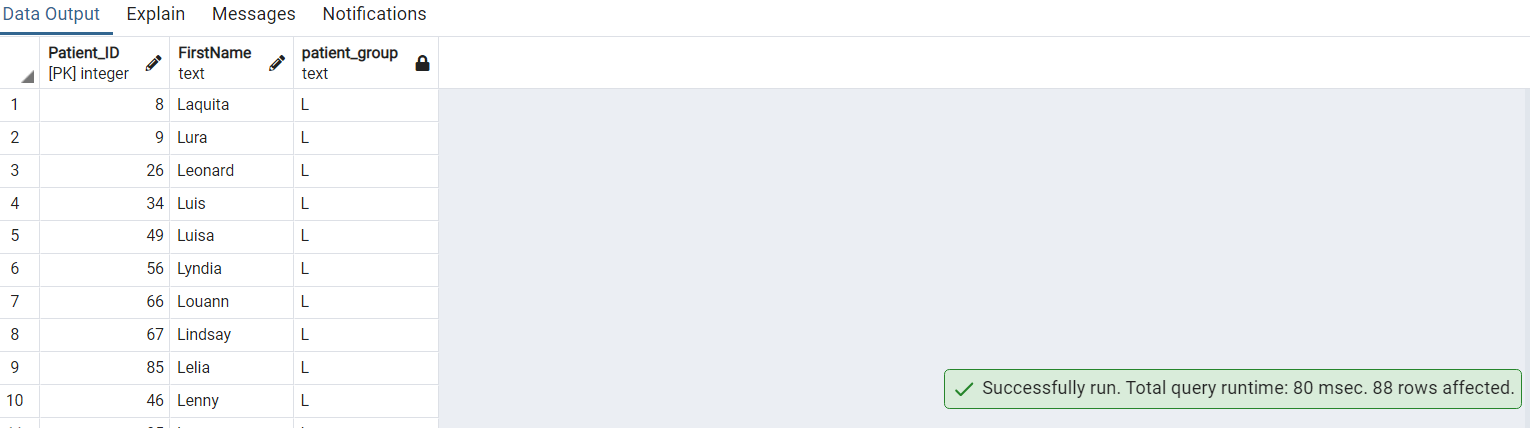
****

**77. Obtain the below output by grouping the patients.**

select "Patient\_ID","FirstName", substring("FirstName",1,1) as patient\_group

from public."Patients"

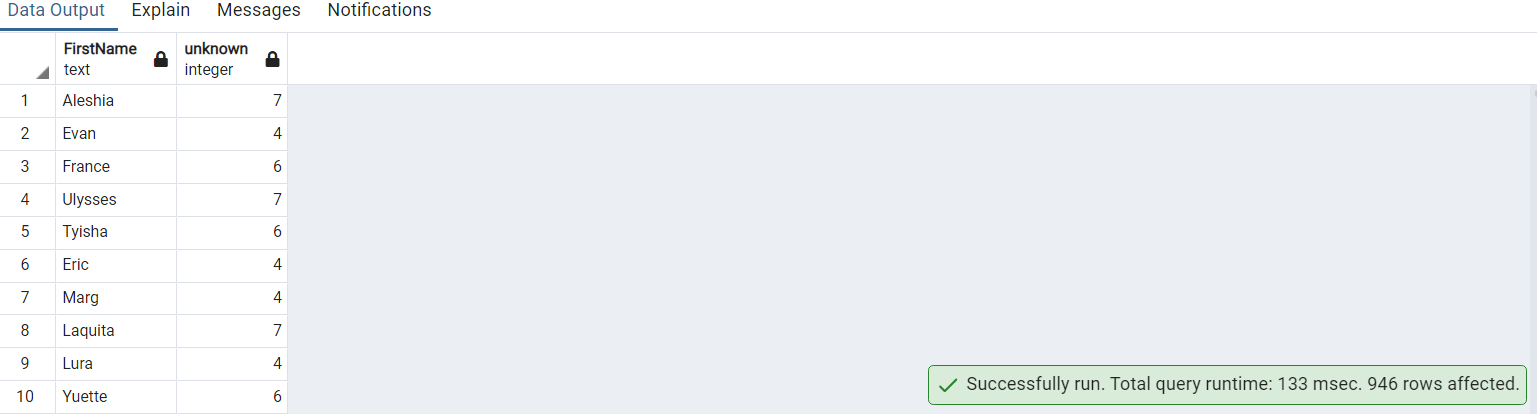
where "FirstName" like 'L%'

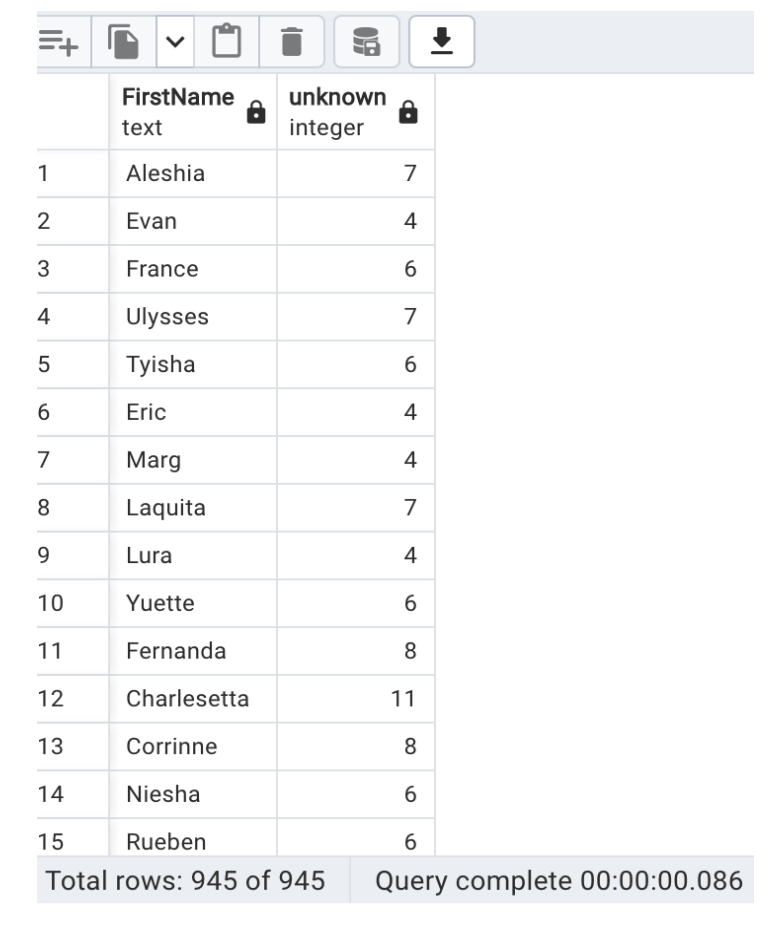




**78. Please go through the below screenshot and create the exact output.**

select "FirstName", LENGTH("FirstName") as unknown from public."Patients"





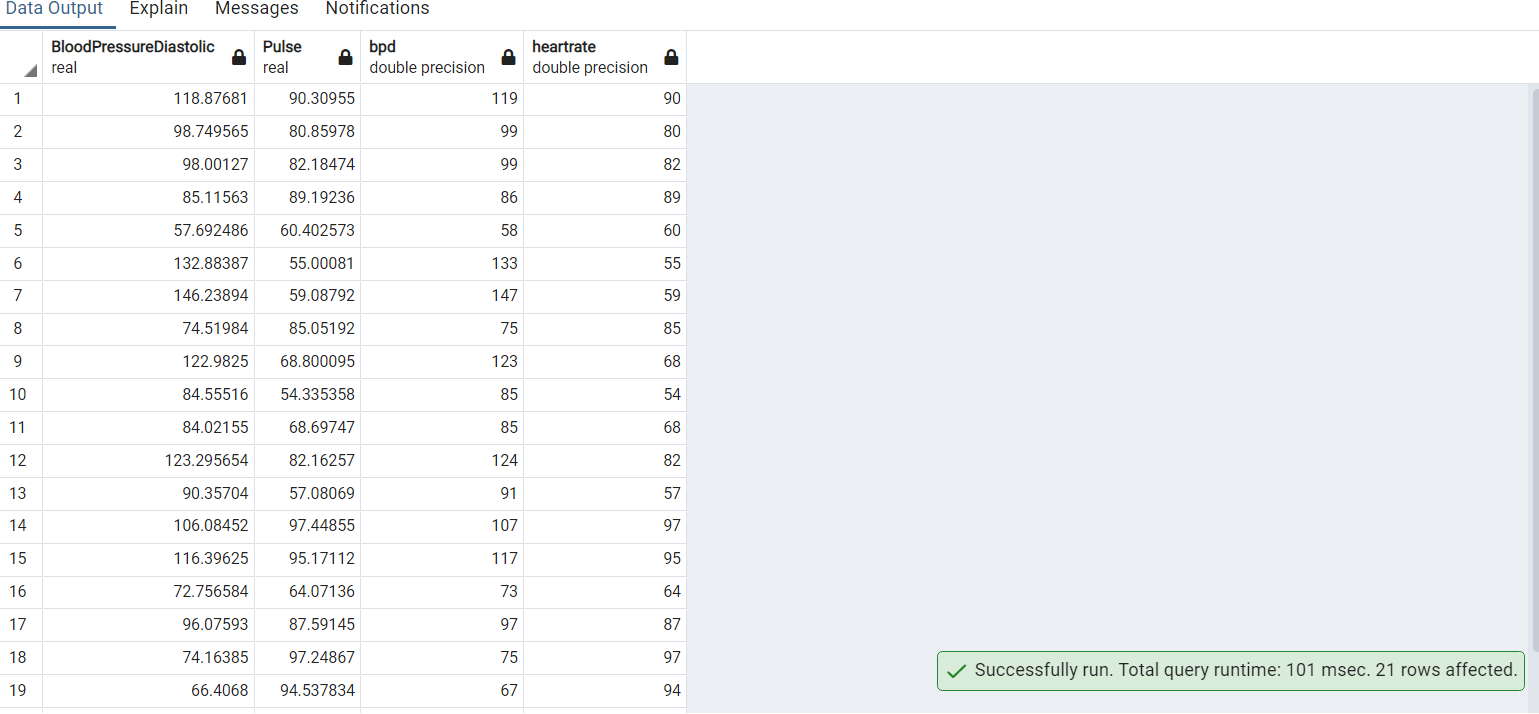
**79. Please go through the below screenshot and create the exact output**

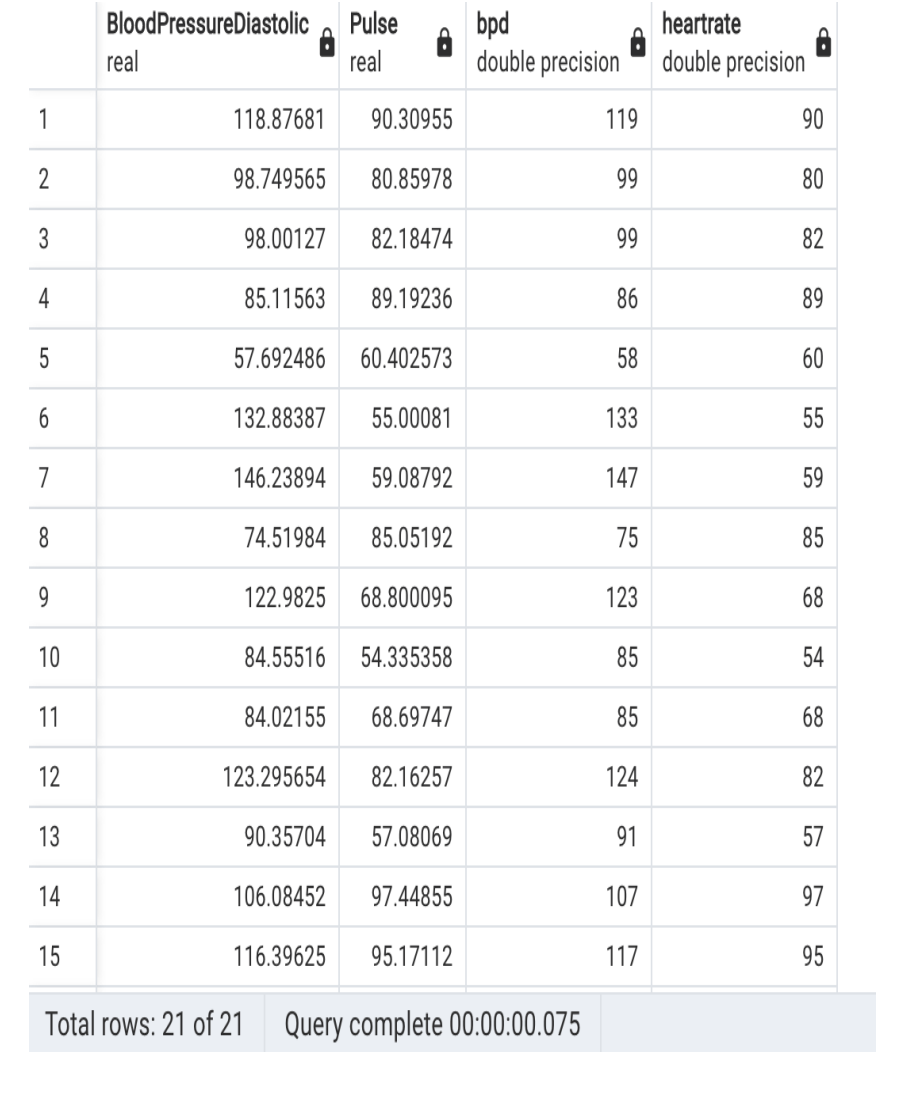
select "BloodPressureDiastolic","Pulse",ceiling("BloodPressureDiastolic")as bpd ,floor("Pulse") as heartrate

from public."AmbulatoryVisits"

OFFSET 1 ROWS

FETCH FIRST 21 ROW ONLY





**80. Please go through the below screenshot and create the exact output**

select "BloodPressureSystolic", CONCAT('The Systolic Blood pressure is ',round(CAST("BloodPressureSystolic" AS NUMERIC), 2)) as Message from public."AmbulatoryVisits"



