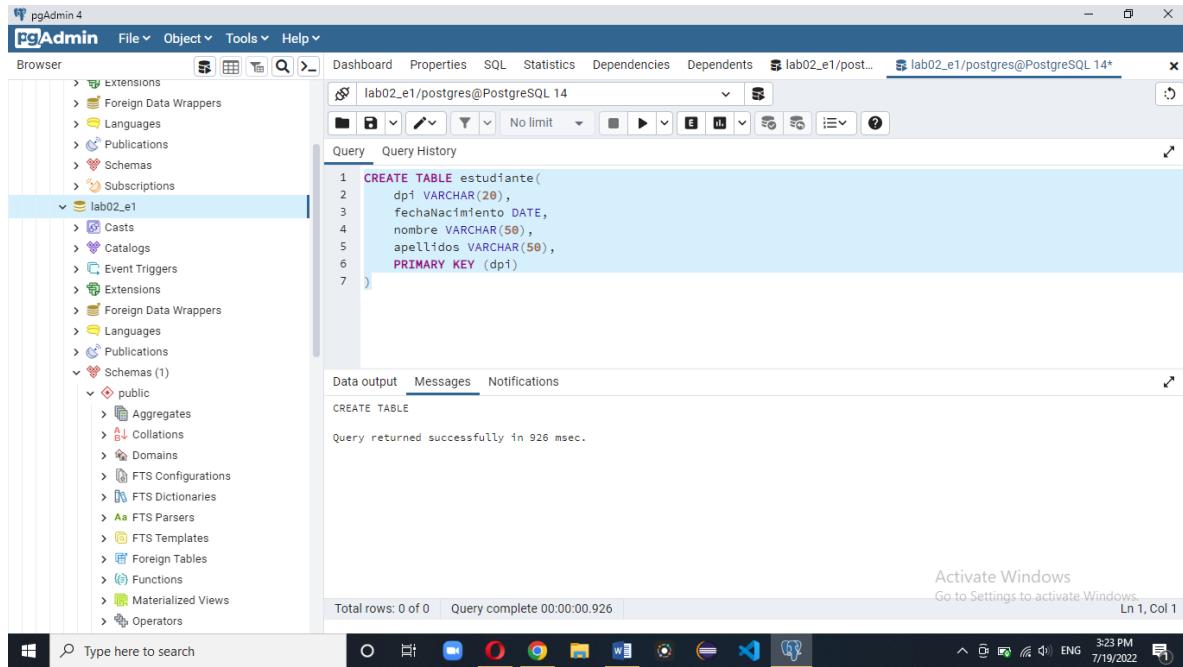


Laboratorio 2 – Introducción a SQL

1.2 Creación de la tabla estudiante.



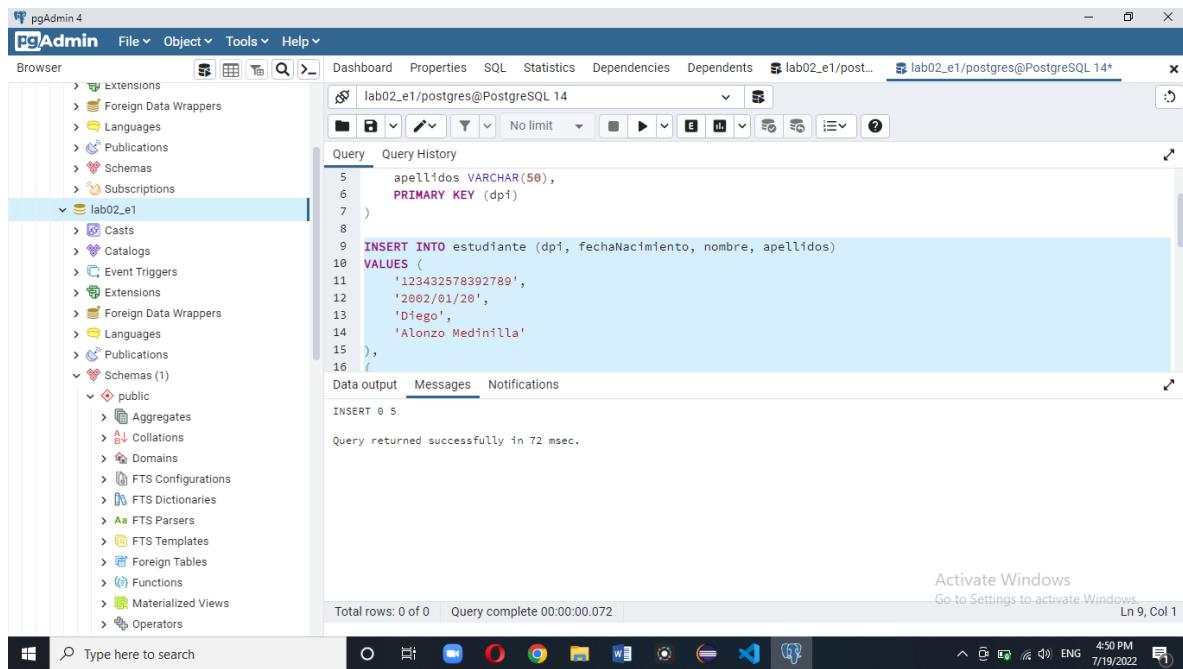
```

CREATE TABLE estudiante(
    dpi VARCHAR(20),
    fechaNacimiento DATE,
    nombre VARCHAR(50),
    apellido VARCHAR(50),
    PRIMARY KEY (dpi)
)

```

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database schema with the 'lab02_e1' schema expanded, showing various objects like casts, catalogs, event triggers, and the newly created 'estudiante' table. The main query editor window contains the SQL code for creating the 'estudiante' table. The status bar at the bottom indicates 'Query returned successfully in 926 msec.'

1.3 Insert



```

INSERT INTO estudiante (dpi, fechaNacimiento, nombre, apellido)
VALUES (
    '123432578392789',
    '2002/01/20',
    'Diego',
    'Alonso Medinilla'
)

```

The screenshot shows the pgAdmin 4 interface again. The left sidebar shows the 'lab02_e1' schema. The main query editor window now contains the SQL code for inserting data into the 'estudiante' table. The status bar at the bottom indicates 'Query returned successfully in 72 msec.'

```

30      '2018/03/01',
31      'Giuliano',
32      'Simeone Zamora'
33  ),
34  (
35      '456432578392789',
36      '2003/04/21',
37      'Isabella',
38      'Recinos Cordoba'
39  )
40  SELECT *
41  FROM estudiante

```

dpi [PK]	fechacimiento	nombre	apellidos
1 123432578392789	2002-01-20	Diego	Alonzo Medinilla
2 456432578392659	2003-04-21	Gaby	Marroquín Siguí
3 455432578392789	2004-06-29	Raul	Solares Salguero
4 475442578392789	2018-03-01	Giuliano	Simeone Zamora
5 456432578392789	2003-04-21	Isabella	Recinos Cordoba

Total rows: 5 of 5 Query complete 00:00:01.078 ✓ Successfully run. Total query runtime: 1 secs 78 msec. 5 rows affected

La inserción de los cinco estudiantes fue exitosa.

1.4 Alteración de una columna a diferente tipo.

```

30      '2018/03/01',
31      'Giuliano',
32      'Simeone Zamora'
33  ),
34  (
35      '456432578392789',
36      '2003/04/21',
37      'Isabella',
38      'Recinos Cordoba'
39  )
40  SELECT *
41  FROM estudiante
42
43  ALTER TABLE estudiante
44  ALTER dpi TYPE VARCHAR(30);

```

ALTER TABLE

Query returned successfully in 227 msec.

Total rows: 5 of 5 Query complete 00:00:00.227 Go to Settings to activate Windows. Ln 43, Col 1

1.5 Creación de tabla curso y tabla asignaciones.

The screenshot shows the pgAdmin 4 interface with the following details:

- Browser:** Shows the schema `lab02_e1` expanded, revealing tables like `estudiante`, `curso`, and `asignacion`.
- Query Editor:** Displays the SQL code for creating the three tables:

```
FROM estudiante
ALTER TABLE estudiante
ALTER dpi TYPE VARCHAR(30);

CREATE TABLE curso (
    codigo VARCHAR(30),
    nombre VARCHAR(50)
)

CREATE TABLE asignacion (
    dpi_estudiante VARCHAR(50),
    codigo_curso VARCHAR(50),
    anio INT,
    semestre INT
)
```
- Messages:** Shows the message "Query returned successfully in 85 msec."
- Table Data:** Below the messages, it says "Total rows: 5 of 5" and "Query complete 00:00:00.085".
- System Bar:** Includes the Windows Start button, a search bar, and the taskbar with icons for File Explorer, Edge, Google Chrome, File Explorer, Camera, Task View, and File Explorer.

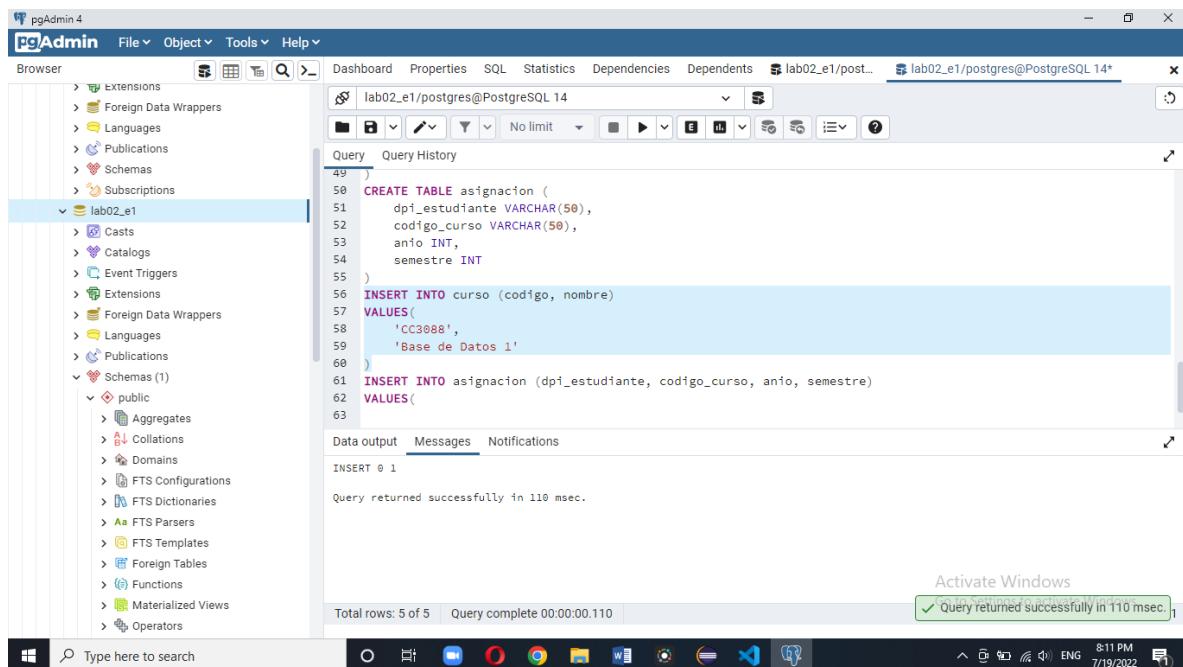
The screenshot shows the pgAdmin 4 interface with the following details:

- Browser:** Shows the schema `lab02_e1` expanded, revealing tables like `estudiante`.
- Query Editor:** Displays the SQL code for inserting data into the `estudiante` table:

```
'2018/03/01',
'Giuliano',
'Simeone Zamora'
),
(
    '456432578392789',
    '2003/04/21',
    'Isabella',
    'Recinos Cordoba'
)
SELECT *
FROM estudiante
ALTER TABLE estudiante
ALTER dpi TYPE VARCHAR(30);
```
- Table Data:** A grid view of the `estudiante` table with the following data:

dpi	fechanacimiento	nombre	apellidos
123432578392789	2002-01-20	Diego	Alonso Medinilla
456432578392659	2003-04-21	Gaby	Marroquín Sigui
455432578392789	2004-06-29	Raul	Solares Salguero
475442578392789	2018-03-01	Giuliano	Simeone Zamora
- Messages:** Shows the message "Query returned successfully in 85 msec."
- Table Data:** Below the table, it says "Total rows: 5 of 5" and "Query complete 00:00:00.170".
- System Bar:** Includes the Windows Start button, a search bar, and the taskbar with icons for File Explorer, Edge, Google Chrome, File Explorer, Camera, Task View, and File Explorer.

1.6 Insert del curso



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database schema for 'lab02_e1'. The main query editor window contains the following SQL code:

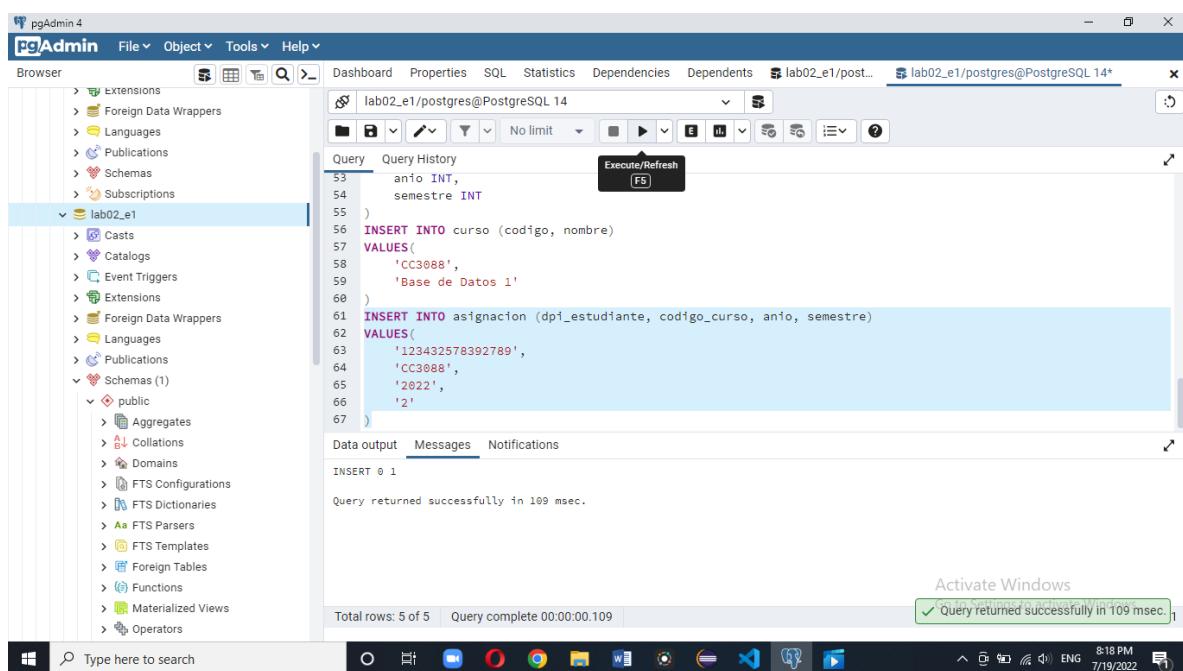
```

49 )
50 CREATE TABLE asignacion (
51   dpi_estudiante VARCHAR(50),
52   codigo_curso VARCHAR(50),
53   anio INT,
54   semestre INT
55 )
56 INSERT INTO curso (codigo, nombre)
57 VALUES(
58   'CC3088',
59   'Base de Datos 1'
60 )
61 INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
62 VALUES(
63

```

The status bar at the bottom indicates "Total rows: 5 of 5" and "Query complete 00:00:00.110". A green message box in the bottom right corner says "Query returned successfully in 110 msec".

Insert de la asignación



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database schema for 'lab02_e1'. The main query editor window contains the following SQL code:

```

53   anio INT,
54   semestre INT
55 )
56 INSERT INTO curso (codigo, nombre)
57 VALUES(
58   'CC3088',
59   'Base de Datos 1'
60 )
61 INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
62 VALUES(
63   '123432578392789',
64   'CC3088',
65   '2022',
66   '2'
67 )

```

The status bar at the bottom indicates "Total rows: 5 of 5" and "Query complete 00:00:00.109". A green message box in the bottom right corner says "Query returned successfully in 109 msec".

1.7 Añadir la llave primaria en las asignaciones. Se eligió que la llave primaria esté compuesta por el dpi del estudiante y el código del curso porque el año y semestre pueden ser diferentes dado que puede reprobar n veces.

pgAdmin 4

File Object Tools Help

Browser

- > Extensions
- > Foreign Data Wrappers
- > Languages
- > Publications
- > Schemas
- > Subscriptions
- > lab02_e1
 - > Casts
 - > Catalogs
 - > Event Triggers
 - > Extensions
 - > Foreign Data Wrappers
 - > Languages
 - > Publications
 - > Schemas (1)
 - > public
 - > Aggregates
 - > Collations
 - > Domains
 - > FTS Configurations
 - > FTS Dictionaries
 - > FTS Parsers
 - > FTS Templates
 - > Foreign Tables
 - > Functions
 - > Materialized Views
 - > Operators

Dashboard Properties SQL Statistics Dependencies Dependents lab02_e1/post... lab02_e1/postgres@PostgreSQL 14*

Query Query History

```

57 VALUES(
58   'CC3088',
59   'Base de Datos 1'
60 )
61 INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
62 VALUES(
63   '123432578392789',
64   'CC3088',
65   '2022',
66   '2'
67 )
68 SELECT *
69 FROM asignacion
70
71 ALTER TABLE asignacion ADD PRIMARY KEY (dpi_estudiante, codigo_curso)
  
```

Data output Messages Notifications

ALTER TABLE

Query returned successfully in 344 msec.

Total rows: 1 of 1 Query complete 00:00:00.344

Activate Windows Go to Settings to activate Windows. Ln 70, Col 1

pgAdmin 4

File Object Tools Help

Browser

- > Extensions
- > Foreign Data Wrappers
- > Languages
- > Publications
- > Schemas
- > Subscriptions
- > lab02_e1
 - > Casts
 - > Catalogs
 - > Event Triggers
 - > Extensions
 - > Foreign Data Wrappers
 - > Languages
 - > Publications
 - > Schemas (1)
 - > public
 - > Aggregates
 - > Collations
 - > Domains
 - > FTS Configurations
 - > FTS Dictionaries
 - > FTS Parsers
 - > FTS Templates
 - > Foreign Tables
 - > Functions
 - > Materialized Views
 - > Operators

Dashboard Properties SQL Statistics Dependencies Dependents lab02_e1/post... lab02_e1/postgres@PostgreSQL 14*

Query Query History

```

58 VALUES(
59   'CC3088',
60   'Base de Datos 1'
61 )
62 INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
63 VALUES(
64   '123432578392789',
65   'CC3088',
66   '2022',
67   '2'
68 )
69 SELECT *
70 FROM asignacion
71 ALTER TABLE asignacion ADD PRIMARY KEY (dpi_estudiante, codigo_curso)
  
```

Data output Messages Notifications

dpi_estudiante	codigo_curso	anio	semestre
123432578392789	CC3088	2022	2

Total rows: 1 of 1 Query complete 00:00:00.132

Activate Windows Go to Settings to activate Windows. Ln 68, Col 1

1.8 Demostración que la base de datos impide la creación de un duplicado en la asignación.

```

58     'CC3088',
59     'Base de Datos 1'
60 )
61 INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
62 VALUES(
63     '123432578392789',
64     'CC3088',
65     '2022',
66     '2'
67 )
68 SELECT *
69 FROM asignacion
70
71 ALTER TABLE asignacion ADD PRIMARY KEY (dpi_estudiante, codigo_curso)
72

```

Error message:

```

ERROR: duplicate key value violates unique constraint "asignacion_pkey"
DETAIL: Key (dpi_estudiante, codigo_curso)=(123432578392789, CC3088) already exists.
SQL state: 23505

```

Total rows: 1 of 1 | Query complete 00:00:00.215 | Data output | Messages | Notifications

Queries:

`CREATE TABLE estudiante(`

`dpi VARCHAR(20),`

`fechaNacimiento DATE,`

`nombre VARCHAR(50),`

`apellidos VARCHAR(50),`

`PRIMARY KEY (dpi)`

`)`

`INSERT INTO estudiante (dpi, fechaNacimiento, nombre, apellidos)`

`VALUES (`

`'123432578392789',`

`'2002/01/20',`

`'Diego',`

`'Alonzo Medinilla'`

`),`

`(`

'456432578392659',

'2003/04/21',

'Gaby',

'Marroquín Siguí'

),

(

'455432578392789',

'2004/06/29',

'Raul',

'Solares Salguero'

),

(

'475442578392789',

'2018/03/01',

'Giuliano',

'Simeone Zamora'

),

(

'456432578392789',

'2003/04/21',

'Isabella',

'Recinos Cordoba'

)

SELECT *

FROM estudiante

ALTER TABLE estudiante

ALTER dpi TYPE VARCHAR(30);

```
CREATE TABLE curso (
```

```
    codigo VARCHAR(30),
```

```
    nombre VARCHAR(50)
```

```
)
```

```
CREATE TABLE asignacion (
```

```
    dpi_estudiante VARCHAR(50),
```

```
    codigo_curso VARCHAR(50),
```

```
    anio INT,
```

```
    semestre INT
```

```
)
```

```
INSERT INTO curso (codigo, nombre)
```

```
VALUES(
```

```
    'CC3088',
```

```
    'Base de Datos 1'
```

```
)
```

```
INSERT INTO asignacion (dpi_estudiante, codigo_curso, anio, semestre)
```

```
VALUES(
```

```
    '123432578392789',
```

```
    'CC3088',
```

```
    '2022',
```

```
    '2'
```

```
)
```

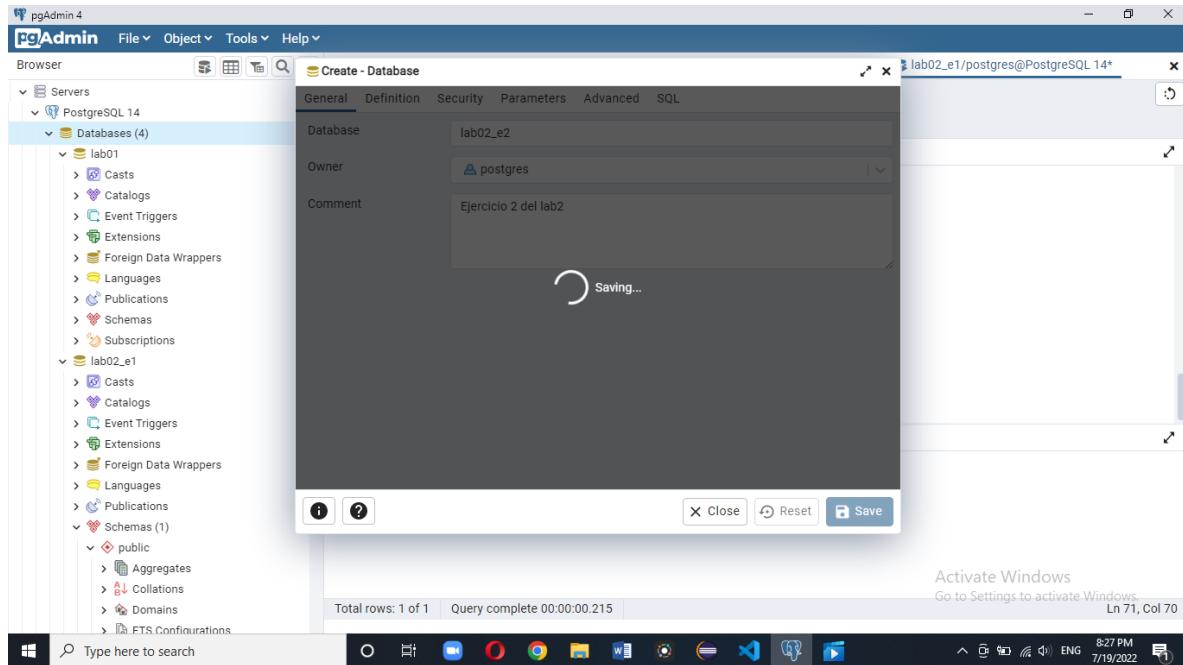
```
SELECT *
```

```
FROM asignacion
```

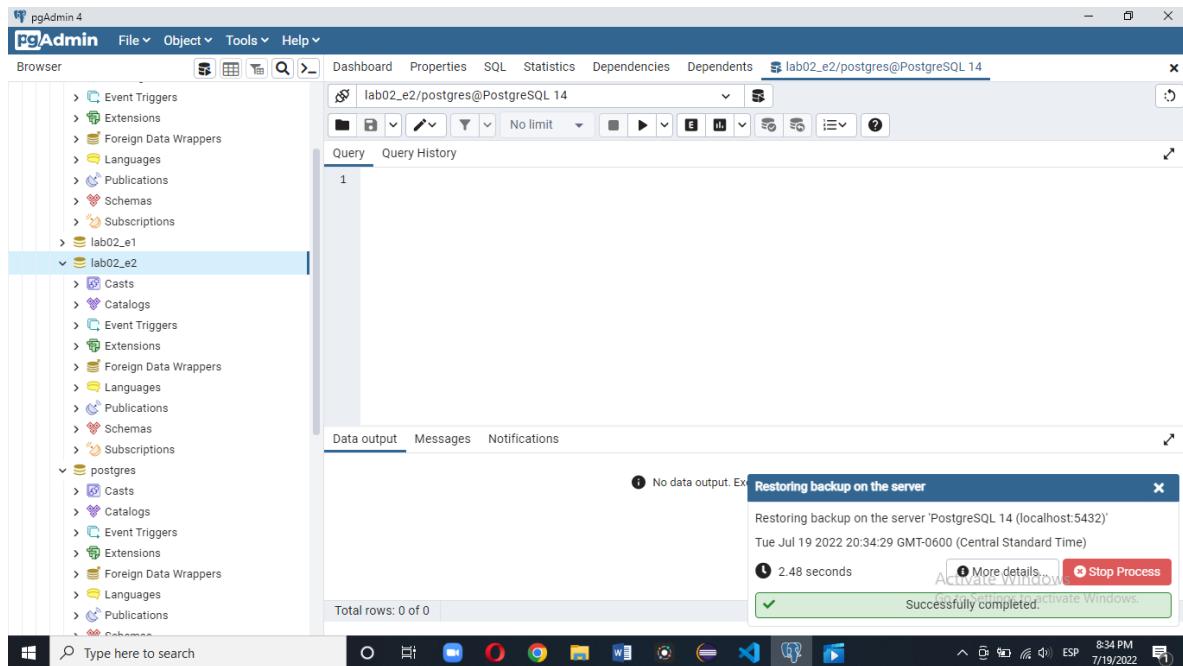
```
ALTER TABLE asignacion ADD PRIMARY KEY (dpi_estudiante, codigo_curso)
```

EJERCICIO 2 – CONSULTAS SQL

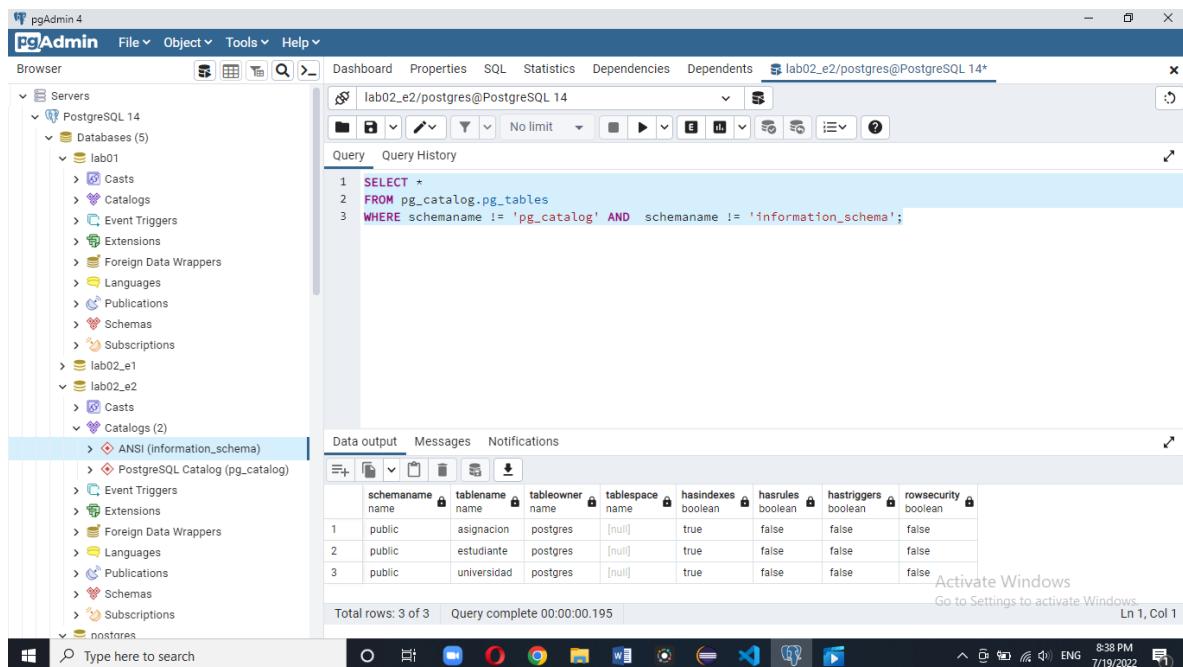
2.1 Creación de base de datos del ejercicio 2



Reestablecida la base de datos.



Las tablas que hay disponibles.



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' and 'PostgreSQL 14'. The 'lab01' database is selected, showing its contents. The 'Tables' node is expanded, listing 'Casts', 'Catalogs', 'Event Triggers', 'Extensions', 'Foreign Data Wrappers', 'Languages', 'Publications', 'Schemas', and 'Subscriptions'. The 'Information Schema' node is also visible. The main window contains a query editor with the following SQL code:

```

1 SELECT *
2 FROM pg_catalog.pg_tables
3 WHERE schemaname != 'pg_catalog' AND schemaname != 'information_schema';

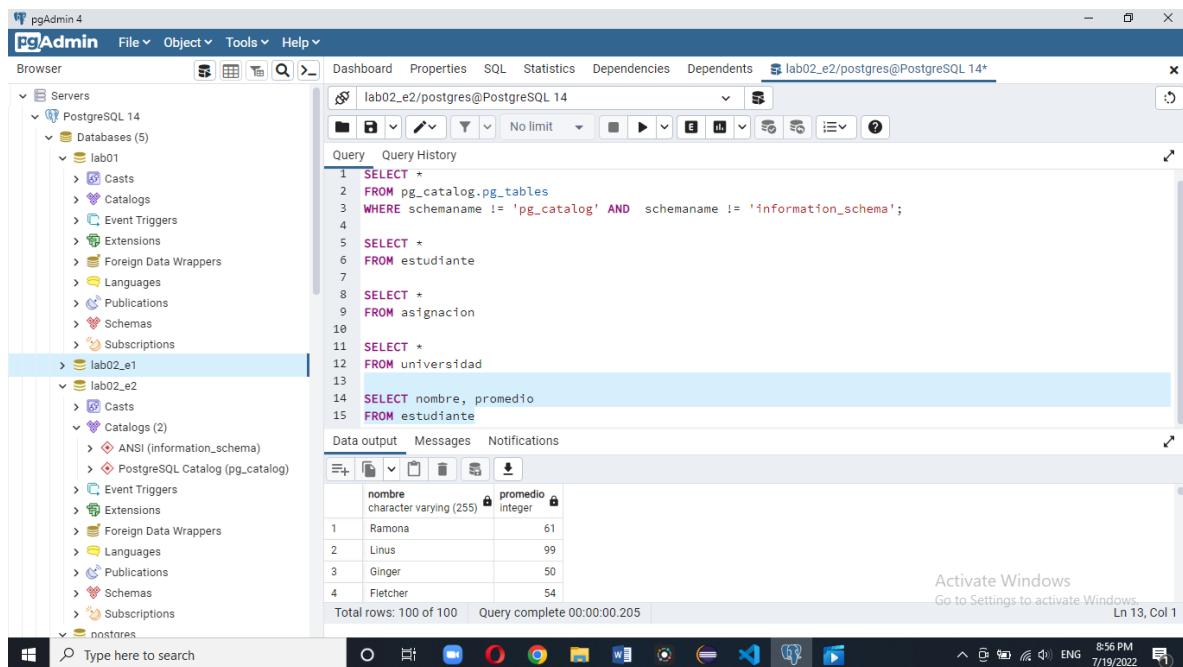
```

Below the query editor is a data grid titled 'Data output' showing the results of the query. The results are as follows:

schemaname	tablename	tableowner	tablespace	hasindexes	hasrules	hastriggers	rowsecurity
public	asignacion	postgres	[null]	true	false	false	false
public	estudiante	postgres	[null]	true	false	false	false
public	universidad	postgres	[null]	true	false	false	false

At the bottom of the pgAdmin window, there is a status bar with the message 'Query complete 00:00:00.195' and a timestamp '7/19/2022 8:38 PM'.

2.2 Mostrar nombre y promedio del estudiante.



The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' and 'PostgreSQL 14'. The 'lab02_e1' database is selected, showing its contents. The 'Tables' node is expanded, listing 'Casts', 'Catalogs', 'Event Triggers', 'Extensions', 'Foreign Data Wrappers', 'Languages', 'Publications', 'Schemas', and 'Subscriptions'. The 'Information Schema' node is also visible. The main window contains a query editor with the following SQL code:

```

1 SELECT *
2 FROM pg_catalog.pg_tables
3 WHERE schemaname != 'pg_catalog' AND schemaname != 'information_schema';
4
5
6 SELECT *
7 FROM estudiante
8
9 SELECT *
10 FROM asignacion
11
12 SELECT *
13 FROM universidad
14
15 SELECT nombre, promedio
16 FROM estudiante

```

Below the query editor is a data grid titled 'Data output' showing the results of the query. The results are as follows:

nombre	promedio
Ramona	61
Linus	99
Ginger	50
Fletcher	54

At the bottom of the pgAdmin window, there is a status bar with the message 'Query complete 00:00:00.205' and a timestamp '7/19/2022 8:56 PM'.

Mostrar nombre y promedio del estudiante de menor a mayor.

```

pgAdmin 4
File Object Tools Help
Browser Dashboard Properties SQL Statistics Dependencies Dependents lab02_e2/postgres@PostgreSQL 14*
Servers PostgreSQL 14 Databases (5) lab01 lab02_e1 lab02_e2
  Casts Catalogs Event Triggers Extensions Foreign Data Wrappers Languages Publications Schemas Subscriptions
  ANSI (information_schema) PostgreSQL Catalog (pg_catalog)
  Event Triggers Extensions Foreign Data Wrappers Languages Publications Schemas Subscriptions
  nostores
Query Query History
FROM universidad
SELECT nombre, promedio
FROM estudiante
SELECT nombre, promedio
FROM estudiante
WHERE promedio>=95
ORDER BY promedio ASC;
SELECT nombre, promedio
FROM estudiante
WHERE promedio>=95
ORDER BY promedio ASC;
Data output Messages Notifications
+-----+-----+
| nombre | promedio |
| character varying (255) | integer |
+-----+-----+
| 1 | Jacob | 95 |
| 2 | Armando | 96 |
| 3 | Hiram | 96 |
| 4 | Serina | 97 |
+-----+-----+
Total rows: 15 of 15 | Query complete 00:00:00.096 | Activate Windows
Go to Settings to activate Windows.
Ln 22, Col 1

```

Mostrar el promedio y nombre del estudiante ordenado de mayor a menor según el promedio.

```

pgAdmin 4
File Object Tools Help
Browser Dashboard Properties SQL Statistics Dependencies Dependents lab02_e2/postgres@PostgreSQL 14*
Servers PostgreSQL 14 Databases (5) lab01 lab02_e1 lab02_e2
  Casts Catalogs Event Triggers Extensions Foreign Data Wrappers Languages Publications Schemas Subscriptions
  ANSI (information_schema) PostgreSQL Catalog (pg_catalog)
  Event Triggers Extensions Foreign Data Wrappers Languages Publications Schemas Subscriptions
  nostores
Query Query History
FROM universidad
SELECT nombre, promedio
FROM estudiante
SELECT nombre, promedio
FROM estudiante
WHERE promedio>=95
ORDER BY promedio ASC;
SELECT nombre, promedio
FROM estudiante
WHERE promedio>=95
ORDER BY promedio DESC;
Data output Messages Notifications
+-----+-----+
| nombre | promedio |
| character varying (255) | integer |
+-----+-----+
| 1 | Ignatius | 100 |
| 2 | Quentin | 100 |
| 3 | Fredericka | 100 |
| 4 | Maxine | 100 |
+-----+-----+
Total rows: 15 of 15 | Query complete 00:00:00.086 | Activate Windows
Go to Settings to activate Windows.
Ln 22, Col 1

```

2.3 Nombres y direcciones de las universidades ubicadas en BURUNDI

The screenshot shows the pgAdmin 4 interface. On the left, the 'Servers' tree view is expanded to show 'PostgreSQL 14' and its databases: 'lab01', 'lab02_e1' (selected), 'lab02_e2', and 'nostrae'. The 'Query' tab in the center contains the following SQL code:

```
16
17   SELECT nombre, promedio
18   FROM estudiante
19   WHERE promedio>=95
20   ORDER BY promedio ASC;
21
22
23   SELECT nombre, promedio
24   FROM estudiante
25   WHERE promedio>=95
26   ORDER BY promedio DESC;
27
28   SELECT universidad, direccion
29   FROM universidad
30   WHERE direccion = 'Burundi'
```

The 'Data output' tab shows the results of the last query:

	universidad	direccion
1	Nec Cursus A Industries	Burundi
2	Varius Ultrices Inc.	Burundi

At the bottom, status information includes 'Total rows: 2 of 2', 'Query complete 00:00:00.091', and 'Activate Windows' with a link to 'Go to Settings to activate Windows.' The system tray at the bottom right shows the date and time as '7/19/2022 9:04 PM'.

2.4 Cantidad de personas que están asignadas a Base de Datos es 16.

pgAdmin 4

File ▾ Object ▾ Tools ▾ Help ▾

Browser

Dashboard Properties SQL Statistics Dependencies Dependents lab02_e2/postgres@PostgreSQL 14*

Query Query History

```

21
22
23 SELECT nombre, promedio
24 FROM estudiante
25 WHERE promedio>=95
26 ORDER BY promedio DESC;
27
28 SELECT universidad, direccion
29 FROM universidad
30 WHERE direccion = 'Burundi'
31
32 SELECT COUNT(id)
33 FROM asignacion
34 WHERE materia = 'D'
35

```

Data output Messages Notifications

	count	bigint
1	16	

Total rows: 1 of 1 Query complete 00:00:00.153

Activate Windows Go to Settings to activate Windows. Ln 31, Col 1

Type here to search

Windows Taskbar: File Explorer, Edge, Google Chrome, FileZilla, File Manager, Camera, Task View, Taskbar Icons, System Tray: ENG 9:07 PM 7/19/2022

pgAdmin 4

File ▾ Object ▾ Tools ▾ Help ▾

Browser

Dashboard Properties SQL Statistics Dependencies Dependents lab02_e2/postgres@PostgreSQL 14*

Query Query History

```

24 FROM estudiante
25 WHERE promedio>=95
26 ORDER BY promedio DESC;
27
28 SELECT universidad, direccion
29 FROM universidad
30 WHERE direccion = 'Burundi'
31
32 SELECT COUNT(id)
33 FROM asignacion
34 WHERE materia = 'D'
35
36 SELECT estudiante_id
37 FROM asignacion
38 WHERE materia = 'D'

```

INTERNET SECURITY Error al autorizar la actualización. Verifique que su licencia sea válida.

Más información sobre este mensaje

Data output Messages Notifications

	estudiante_id	integer
13	178	
14	169	
15	116	
16	167	

Total rows: 16 of 16 Query complete 00:00:00.099

Activate Windows Go to Settings to activate Windows. Ln 39, Col 20

Type here to search

Windows Taskbar: File Explorer, Edge, Google Chrome, FileZilla, File Manager, Camera, Task View, Taskbar Icons, System Tray: ENG 9:08 PM 7/19/2022

2.6 La cantidad de notas por debajo de 61 sin importar la universidad es de 108.

pgAdmin 4

File ▾ Object ▾ Tools ▾ Help ▾

Browser

- Servers
 - PostgreSQL 14
 - Databases (5)
 - lab01
 - Casts
 - Catalogs
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - lab02_e1
 - lab02_e2
 - Casts
 - Catalogs (2)
 - ANSI (information_schema)
 - PostgreSQL Catalog (pg_catalog)
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - nostores

Query Query History

```

28 SELECT universidad, direccion
29 FROM universidad
30 WHERE direccion = 'Burundi'
31
32 SELECT COUNT(id)
33 FROM asignacion
34 WHERE materia = 'D'
35
36 SELECT estudiante_id
37 FROM asignacion
38 WHERE materia = 'D'
39
40 SELECT COUNT (ID)
41 FROM asignacion
42 WHERE nota <61

```

Data output Messages Notifications

count	bigint
1	108

Total rows: 1 of 1 Query complete 00:00:00.088

Activate Windows Go to Settings to activate Windows. Ln 40, Col 1

pgAdmin 4

File ▾ Object ▾ Tools ▾ Help ▾

Browser

- Servers
 - PostgreSQL 14
 - Databases (5)
 - lab01
 - Casts
 - Catalogs
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - lab02_e1
 - lab02_e2
 - Casts
 - Catalogs (2)
 - ANSI (information_schema)
 - PostgreSQL Catalog (pg_catalog)
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - nostores

Query Query History

```

33 FROM asignacion
34 WHERE materia = 'D'
35
36 SELECT estudiante_id
37 FROM asignacion
38 WHERE materia = 'D'
39
40 SELECT COUNT (ID)
41 FROM asignacion
42 WHERE nota <61
43
44 SELECT nota
45 FROM asignacion
46 WHERE nota <61
47

```

Data output Messages Notifications

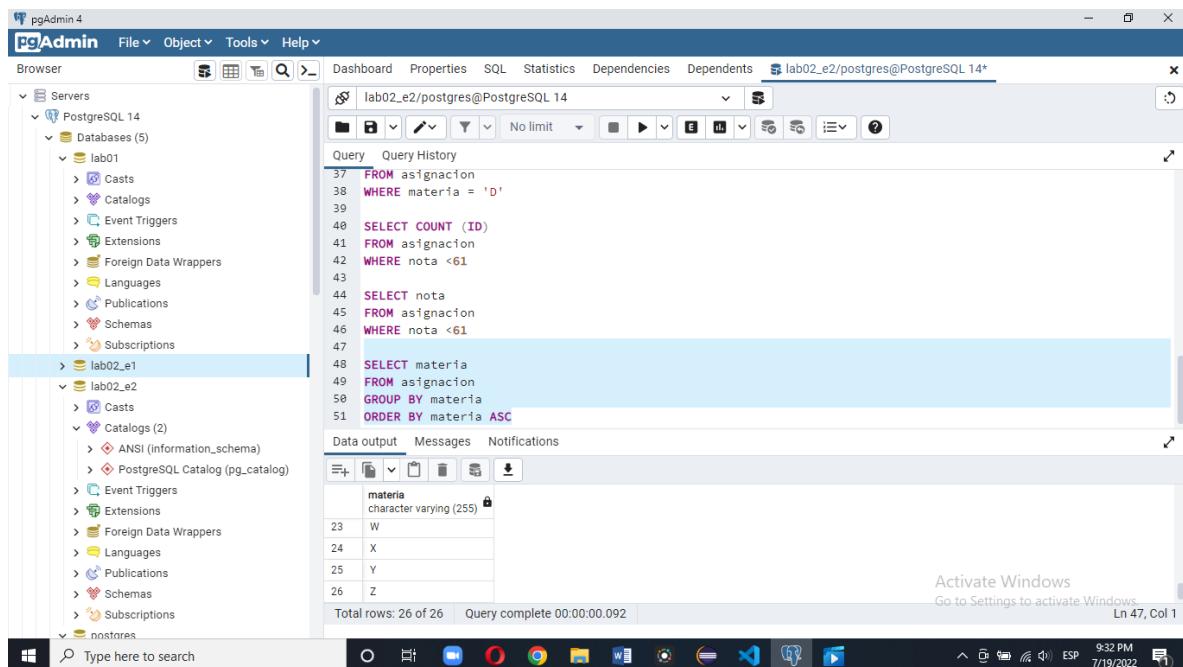
nota	integer
105	51
106	51
107	58
108	58

Total rows: 108 of 108 Query complete 00:00:00.089

Activate Windows Go to Settings to activate Windows. Ln 44, Col 1

2.5 Cursos disponibles en la base de datos ordenados alfabéticamente.

Forma de seleccionarlos mediante agrupaciones.



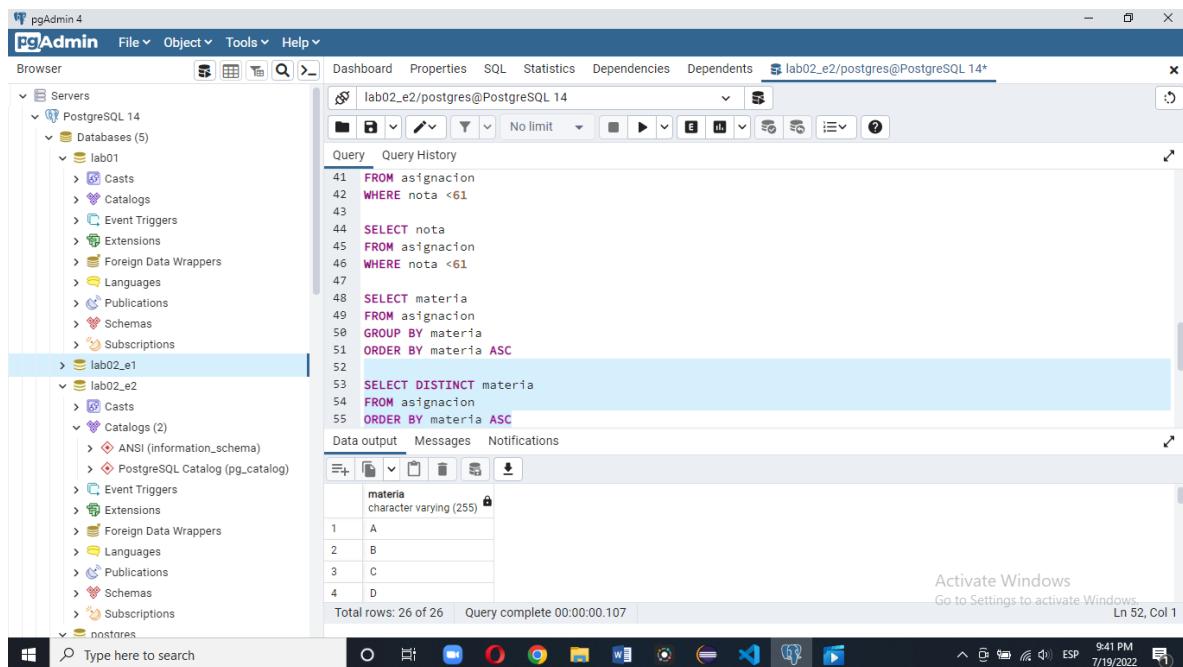
```

FROM asignacion
WHERE materia = 'D'
SELECT COUNT (ID)
FROM asignacion
WHERE nota <61
SELECT nota
FROM asignacion
WHERE nota <61
SELECT materia
FROM asignacion
GROUP BY materia
ORDER BY materia ASC
  
```

materia	character varying (255)
23	W
24	X
25	Y
26	Z

Total rows: 26 of 26 Query complete 00:00:00.092

Forma usando distinct para seleccionar las diferentes materias que hay.



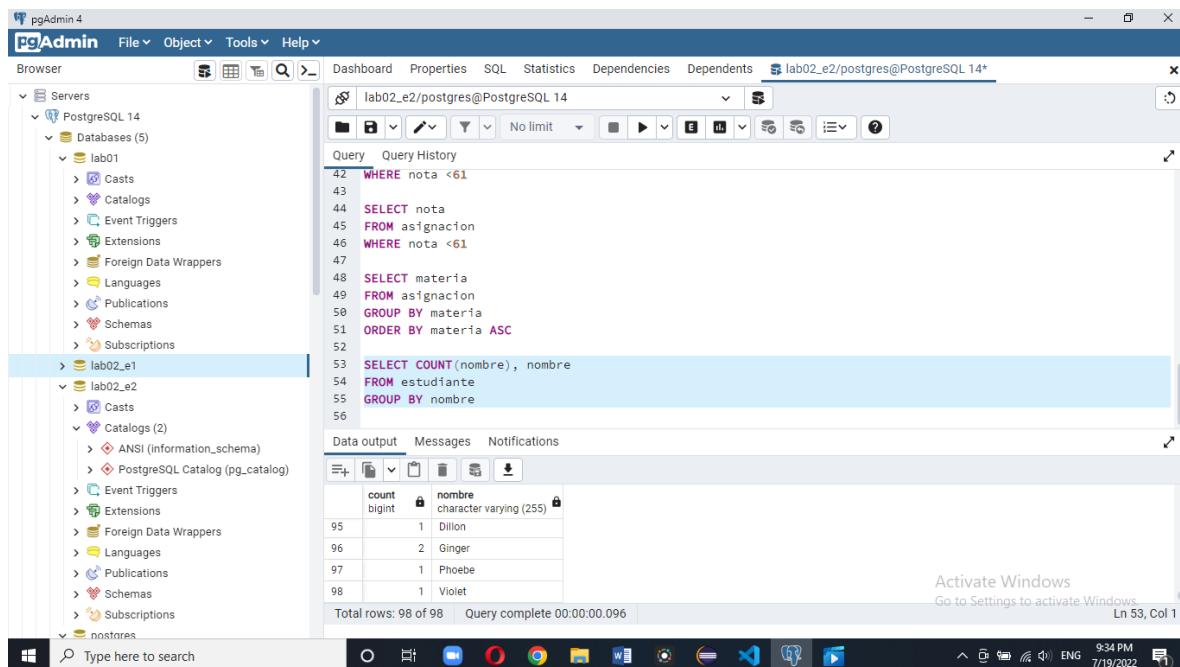
```

FROM asignacion
WHERE nota <61
SELECT nota
FROM asignacion
WHERE nota <61
SELECT materia
FROM asignacion
GROUP BY materia
ORDER BY materia ASC
  
```

materia	character varying (255)
1	A
2	B
3	C
4	D

Total rows: 26 of 26 Query complete 00:00:00.107

2.7 Sí hay estudiantes con nombre repetido.



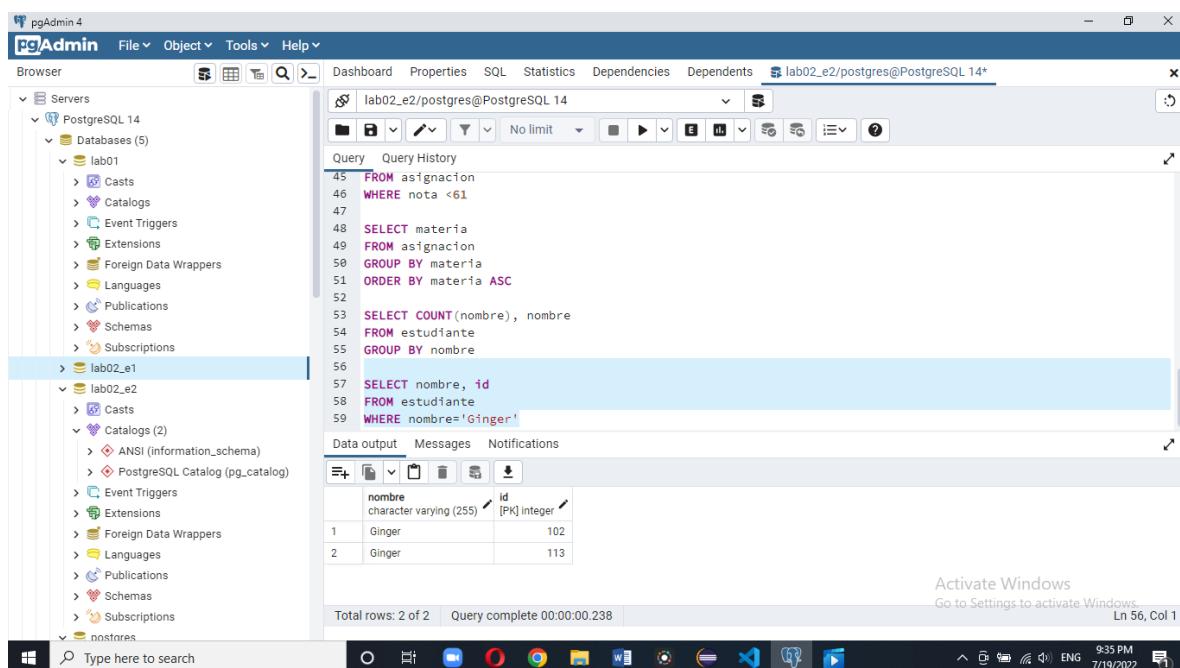
```

SELECT COUNT(nombre), nombre
FROM estudiante
GROUP BY nombre

```

	count	nombre
95	1	Dillon
96	2	Ginger
97	1	Phoebe
98	1	Violet

Total rows: 98 of 98 | Query complete 00:00:00.096 | Activate Windows
Go to Settings to activate Windows... Ln 53, Col 1



```

SELECT nombre, id
FROM estudiante
WHERE nombre='Ginger'

```

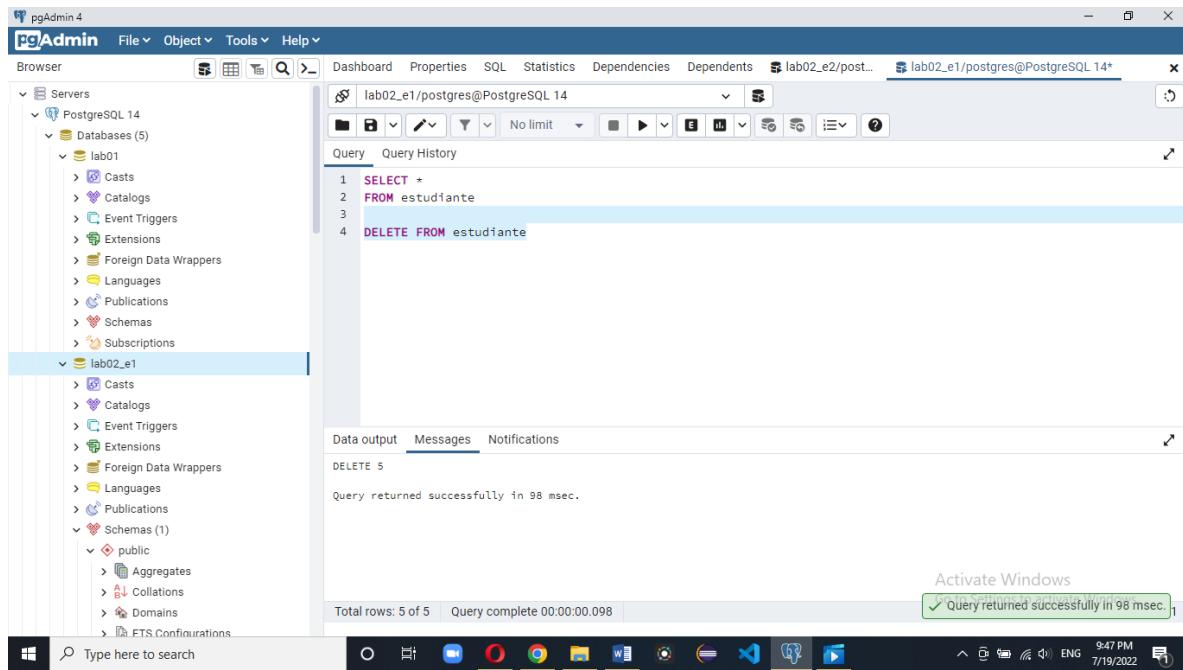
nombre	id
Ginger	102
Ginger	113

Total rows: 2 of 2 | Query complete 00:00:00.238 | Activate Windows
Go to Settings to activate Windows... Ln 56, Col 1

Cómo se puede observar hay dos Ginger con diferente id, por lo tanto, son diferentes Ginger, por ende, hay nombres repetidos.

EJERCICIO 3 – LIMPIEZA DE LA BASE DE DATOS

3.1 Eliminar los datos de la base de datos 1



The screenshot shows the pgAdmin 4 interface. In the left sidebar, under 'Servers' and 'PostgreSQL 14', the 'Databases' section is expanded, showing 'lab01' and 'lab02_e1'. The 'lab02_e1' database is selected. In the main query editor window, the following SQL code is run:

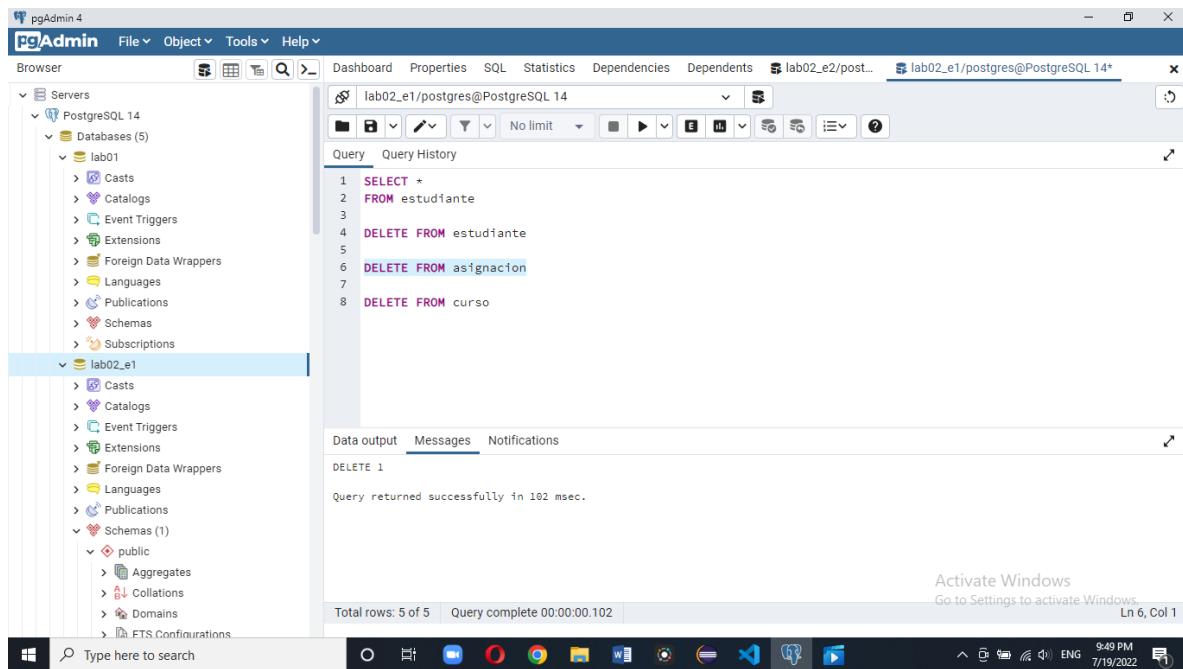
```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
```

The 'Messages' tab shows the result of the query:

DELETE 5
Query returned successfully in 98 msec.

Total rows: 5 of 5 Query complete 00:00:00.098

At the bottom right of the pgAdmin window, there is a message: 'Activate Windows' and 'Query returned successfully in 98 msec.'



This screenshot shows the pgAdmin 4 interface with the same setup as the first one. The 'lab02_e1' database is selected. The user runs a series of DELETE statements:

```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
5
6 DELETE FROM asignacion
7
8 DELETE FROM curso
```

The 'Messages' tab shows the results:

DELETE 1
Query returned successfully in 102 msec.

Total rows: 5 of 5 Query complete 00:00:00.102

At the bottom right of the pgAdmin window, there is a message: 'Activate Windows' and 'Go to Settings to activate Windows.'

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' > 'PostgreSQL 14' > 'lab01' > 'lab02_e1'. The main query editor window contains the following SQL code:

```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
5
6 DELETE FROM asignacion
7
8 DELETE FROM curso
```

The status bar at the bottom right indicates "Query returned successfully in 102 msec." and "Total rows: 5 of 5".

Eliminar datos de la base de datos 2

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' > 'PostgreSQL 14' > 'lab01' > 'lab02_e1'. The main query editor window contains the following SQL code:

```
64
65
66
67 SELECT nombre, id
68 FROM estudiante
69 WHERE nombre='Ginger'
70
71 SELECT *
72 FROM estudiante
73
74 DELETE FROM estudiante
75
76 DELETE FROM asignacion
77
78 DELETE FROM curso
```

The status bar at the bottom right indicates "Query returned successfully in 102 msec." and "Total rows: 26 of 26".

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' > 'PostgreSQL 14' > 'lab01' > 'lab02_e1'. The main query editor window contains the following SQL code:

```
64  
65  
66  
67 SELECT nombre, id  
68 FROM estudiante  
69 WHERE nombre='Ginger'  
70  
71 SELECT *  
72 FROM estudiante  
73  
74 DELETE FROM estudiante  
75  
76 DELETE FROM asignacion  
77  
78 DELETE FROM curso
```

The status bar at the bottom indicates "Query returned successfully in 102 msec." and "Total rows: 26 of 26". The system tray shows the date and time as 7/19/2022 9:50 PM.

This screenshot is nearly identical to the one above, showing the pgAdmin 4 interface with the same database structure and a slightly different set of executed SQL statements:

```
64  
65  
66  
67 SELECT nombre, id  
68 FROM estudiante  
69 WHERE nombre='Ginger'  
70  
71 SELECT *  
72 FROM estudiante  
73  
74 DELETE FROM estudiante  
75  
76 DELETE FROM asignacion  
77  
78 DELETE FROM universidad
```

The status bar indicates "Query returned successfully in 86 msec." and "Total rows: 26 of 26". The system tray shows the date and time as 7/19/2022 9:51 PM.

3.2 Eliminar tablas de la base de datos 1

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' > 'PostgreSQL 14' > 'lab01' > 'lab02_e1'. The main window contains a query editor with the following SQL code:

```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
5
6 DELETE FROM asignacion
7
8 DELETE FROM curso
9
10 DROP TABLE estudiante
```

The status bar at the bottom indicates "Query returned successfully in 113 msec." and "Total rows: 5 of 5". The system tray shows the date and time as 7/19/2022 9:52 PM.

This screenshot is nearly identical to the one above, showing the same pgAdmin 4 interface and database structure. The main difference is the additional lines 11 and 12 in the query editor:

```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
5
6 DELETE FROM asignacion
7
8 DELETE FROM curso
9
10 DROP TABLE estudiante
11
12 DROP TABLE asignacion
13
```

The status bar now shows "Query returned successfully in 184 msec." and "Total rows: 5 of 5". The system tray shows the date and time as 7/19/2022 9:52 PM.

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the 'Servers' tree, with 'PostgreSQL 14' selected. Under 'PostgreSQL 14', 'Databases' is expanded, showing 'lab01' and 'lab02_e1'. The 'lab02_e1' node is selected. The main pane shows a query editor with the following SQL code:

```
1 SELECT *
2 FROM estudiante
3
4 DELETE FROM estudiante
5
6 DELETE FROM asignacion
7
8 DELETE FROM curso
9
10 DROP TABLE estudiante
11
12 DROP TABLE asignacion
13
14 DROP TABLE curso
```

The status bar at the bottom indicates 'Query returned successfully in 99 msec.' and 'Total rows: 5 of 5 Query complete 00:00:00.099'.

Eliminar las tablas de la segunda base de datos.

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the 'Servers' tree, with 'PostgreSQL 14' selected. Under 'PostgreSQL 14', 'Databases' is expanded, showing 'lab01' and 'lab02_e1'. The 'lab02_e1' node is selected. The main pane shows a query editor with the following SQL code:

```
70
71 SELECT *
72 FROM estudiante
73
74 DELETE FROM estudiante
75
76 DELETE FROM asignacion
77
78 DELETE FROM universidad
79
80 DROP TABLE estudiante
81
82 DROP TABLE asignacion
83
84 DROP TABLE universidad
```

The status bar at the bottom indicates 'Query returned successfully in 162 msec.' and 'Total rows: 26 of 26 Query complete 00:00:00.162'.

A message box in the bottom right corner says 'Activate Windows' and 'Go to Settings to activate Windows.'

The screenshot shows the pgAdmin 4 interface. The left sidebar displays the database structure under 'Servers' > 'PostgreSQL 14' > 'lab01' > 'lab02_e1'. The main window contains a query editor with the following SQL code:

```
70
71 SELECT *
72 FROM estudiante
73
74 DELETE FROM estudiante
75
76 DELETE FROM asignacion
77
78 DELETE FROM universidad
79
80 DROP TABLE estudiante
81
82 DROP TABLE asignacion
83
84 DROP TABLE universidad
```

The status bar at the bottom indicates "Query returned successfully in 85 msec." and "Total rows: 26 of 26". A green message bar at the bottom right says "✓ Query returned successfully in 85 msec. Ln 81, Col 1".

This screenshot is nearly identical to the one above, showing the same pgAdmin 4 interface and database structure. The query editor contains the same SQL code. The status bar at the bottom indicates "Query returned successfully in 77 msec." and "Total rows: 26 of 26". A green message bar at the bottom right says "✓ Query returned successfully in 77 msec. Ln 84, Col 23".

3.3 Eliminar las bases de datos

