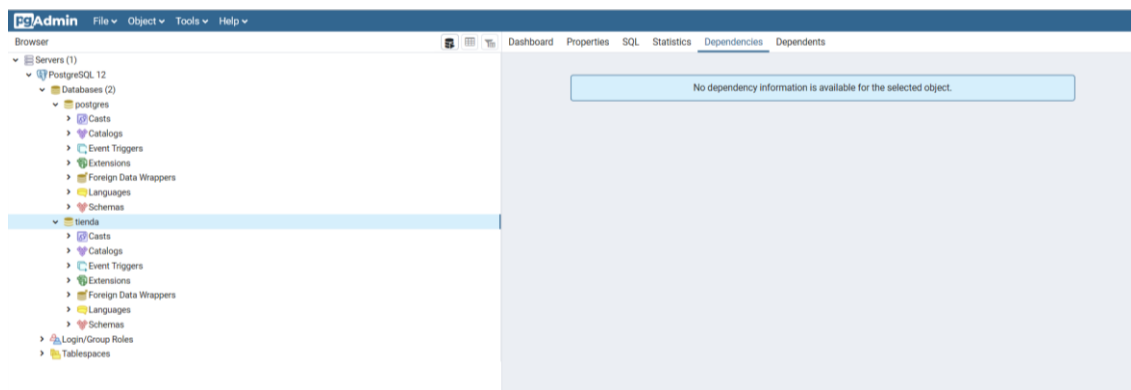
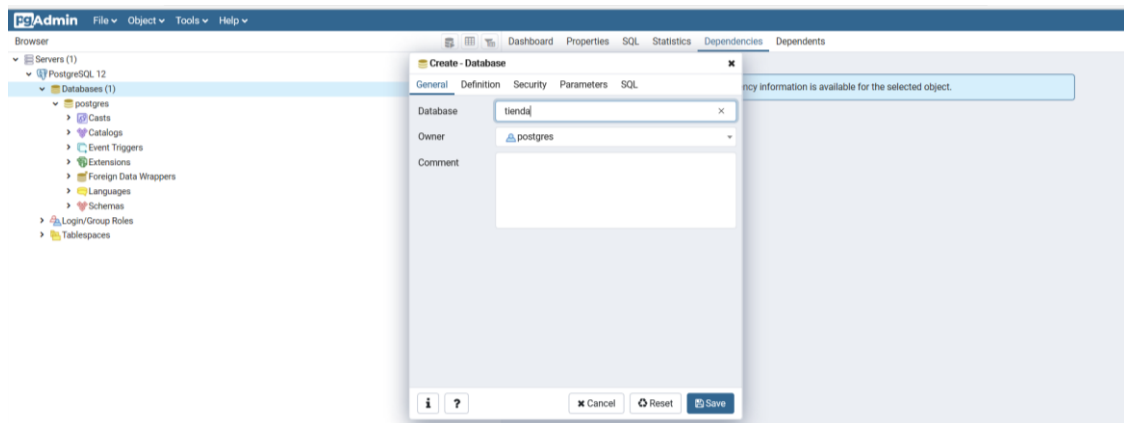
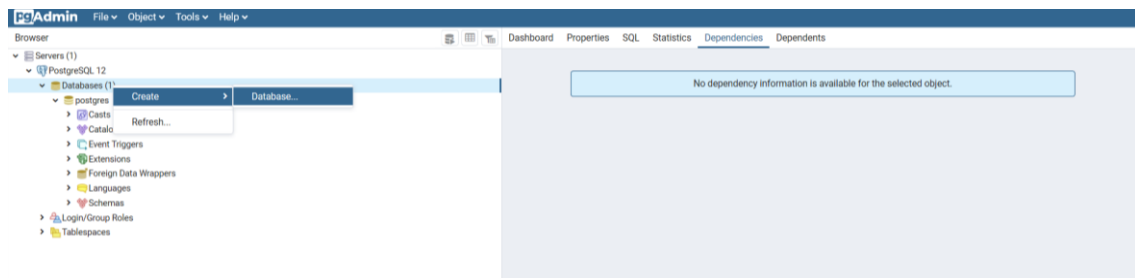


# BASE DE DATOS RELACIONALES

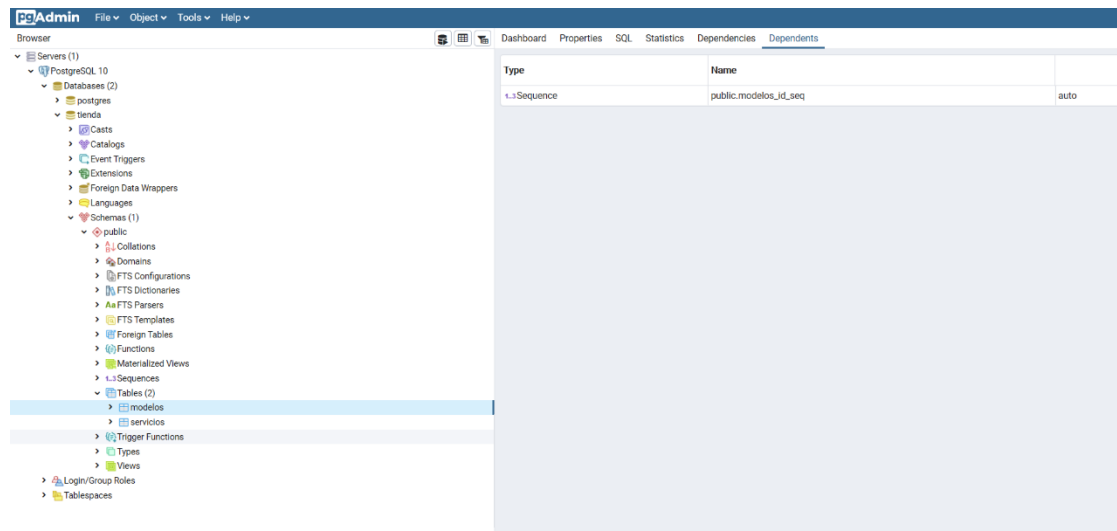
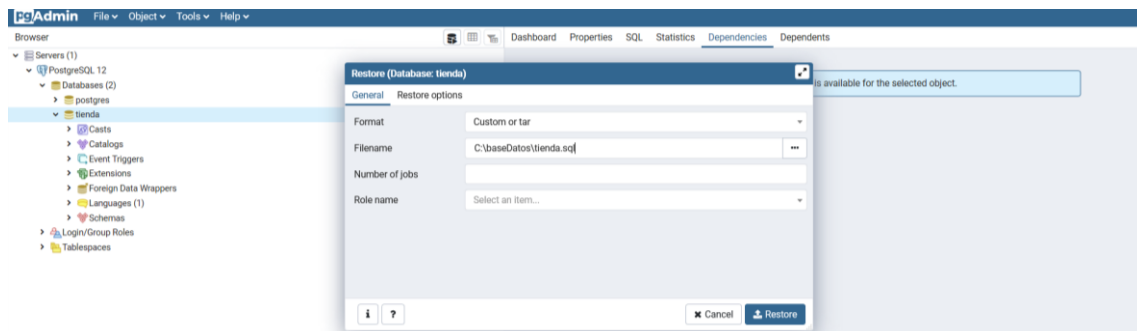
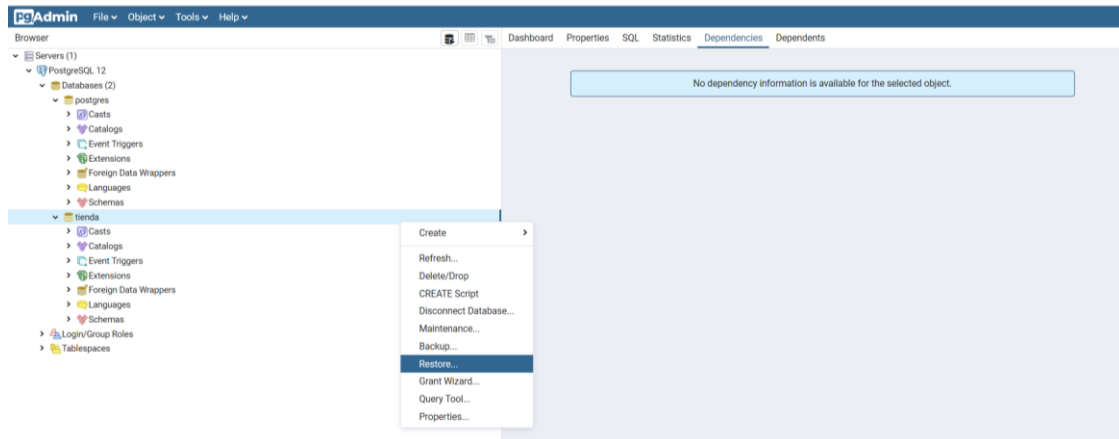
## TRABAJO FINAL

### TIENDA DE REPARACIÓN DE CELULARES

1. Crear la base de datos tienda.

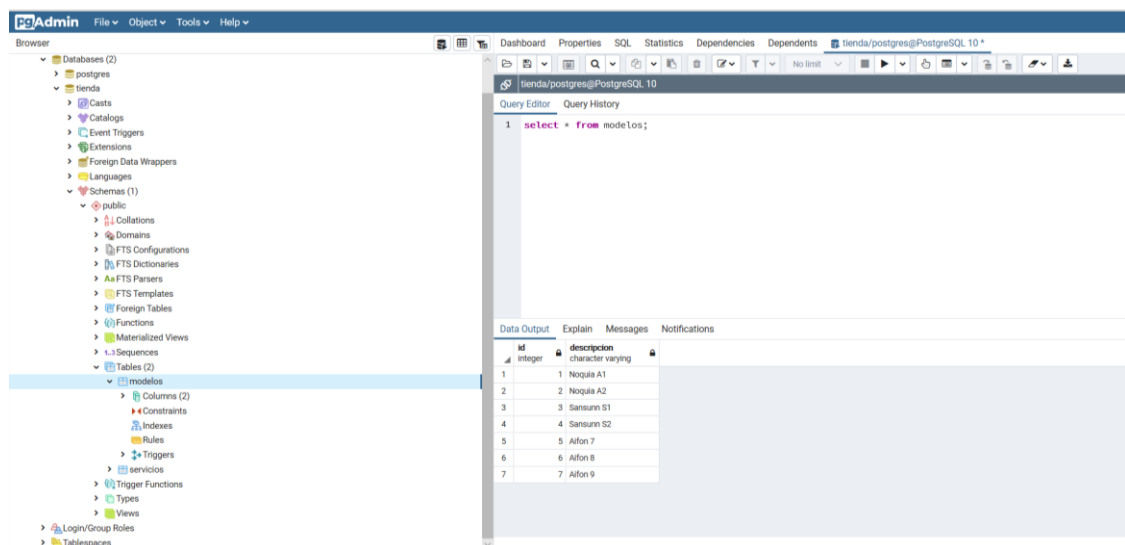
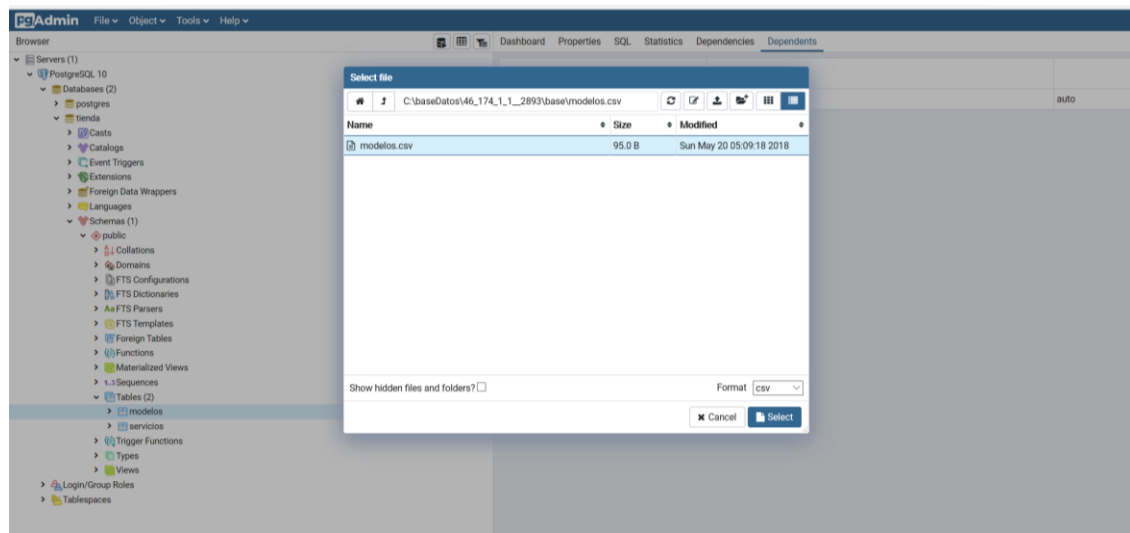
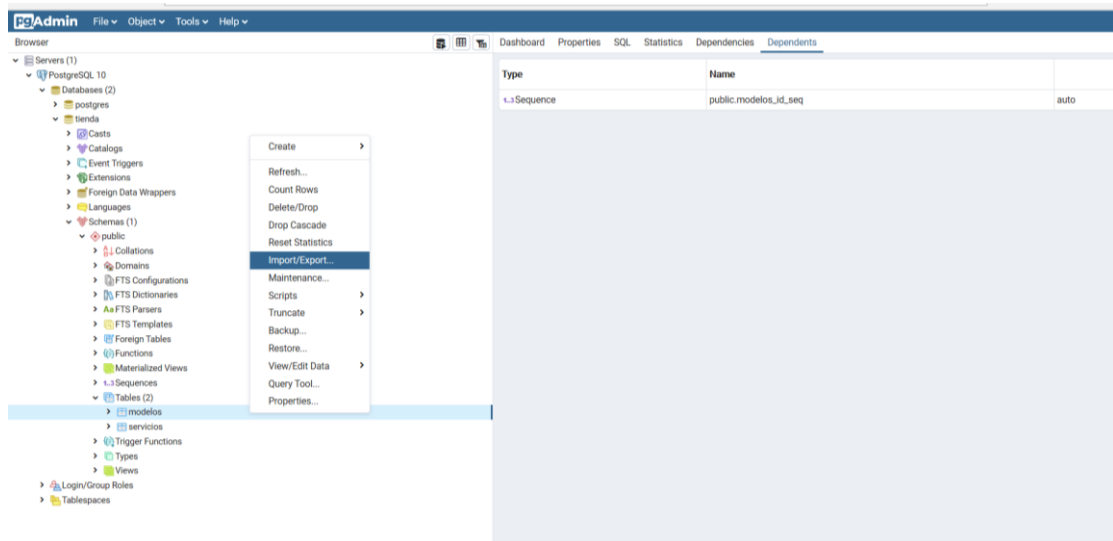


## 2. Recuperar la base de datos usando el archivo tienda.sql



Tuve que cambiar la versión de PostgreSQL de 12 a 10 debido a que me ponía un error y no pude solucionarlo y empezar todo de nuevo.

### 3. Importar el contenido de los modelos usando la opción import



#### 4. Crear las tablas Clientes y Ordenes ...

##### a. Tabla Modelos

The screenshot shows the pgAdmin interface with the 'modelos' table selected in the left-hand browser pane. The table is located under the 'tienda' database, 'public' schema, and 'modelos' table. The table structure is displayed in the 'Data Output' pane, showing two columns: 'id' (integer) and 'descripcion' (character varying). The data output shows seven rows of data:

id	descripcion
1	Noquia A1
2	Noquia A2
3	Sansunn S1
4	Sansunn S2
5	Afon 7
6	Afon 8
7	Afon 9

##### b. Tabla Servicios

The screenshot shows the pgAdmin interface with the 'servicios' table selected in the left-hand browser pane. The table is located under the 'tienda' database, 'public' schema, and 'servicios' table. The table structure is displayed in the 'Data Output' pane, showing three columns: 'id' (integer), 'descripcion' (character varying), and 'precio' (real). The data output shows two rows of data:

id	descripcion	precio
1	cambio de pantalla	90
2	cambio de bateria	50

##### c. Tabla Clientes

The screenshot shows the PgAdmin interface with the 'clientes' table selected in the left-hand tree. The table has three columns: 'id' (integer), 'nombre' (character varying), and 'telefono' (character varying). The 'Data Output' pane displays the following data:

id	nombre	telefono
1	Luis Torres	55555555
2	Ana	123123123
3	Maria	11111111
4	Pedro	2222222

The 'Query Editor' shows the following SQL query:

```
1 select * from clientes;
```

The status bar at the bottom indicates: "Successfully run. Total query runtime: 92 msec. 4 rows affected."

#### d. Tabla Ordenes

The screenshot shows the PgAdmin interface with the 'ordenes' table selected in the left-hand tree. The table has four columns: 'id' (integer), 'id\_cliente' (integer), 'id\_servicio' (integer), and 'id\_modelo' (integer). The 'Data Output' pane displays the following data:

id	id_cliente	id_servicio	id_modelo
1	1	1	1
2	2	1	2
3	3	2	3
4	4	3	2
5	5	3	1
6	6	4	1
7	7	4	1

The 'Query Editor' shows the following SQL query:

```
1 select * from ordenes;
```

The status bar at the bottom indicates: "Successfully run. Total query runtime: 158 msec. 7 rows affected."

Las llaves foráneas son : id\_cliente, id\_servicio, id\_modelo.

#### 5. Consultas:

- Nombre y costo total por cliente.

pgAdmin

File Object Tools Help

Browser

Servers (1)

- PostgreSQL 10
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    - postgres
      - tienda
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        - Catalogs
        - Event Triggers
        - Extensions
        - Foreign Data Wrappers
        - Languages
        - Schemas (1)
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            - Collations
            - Domains
            - FTS Configurations
            - FTS Dictionaries
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            - FTS Templates
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            - Functions
            - Materialized Views
            - Sequences
            - Tables (4)
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            - Views

tienda/postgres@PostgreSQL 10 \*

Query Editor Query History

```
1 Select clientes.id, clientes.nombre, SUM(servicios.precio) AS total FROM
2 clientes INNER JOIN ordenes ON clientes.id=ordenes.id_cliente
3 INNER JOIN servicios ON ordenes.id_servicio=servicios.id GROUP BY clientes.id, clientes.nombre;
```

Data Output Explain Messages Notifications

	id	nombre	total
	integer	character varying	real
1	3	María	140
2	1	Luis Torres	140
3	2	Ana	50
4	4	Pedro	180

Successfully run. Total query runtime: 191 msec. 4 rows affected.

b. Costo promedio actual en toda la tienda

pgAdmin

File Object Tools Help

Browser

Servers (1)

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            - Trigger Functions
            - Types
            - Views

tienda/postgres@PostgreSQL 10 \*

Query Editor Query History

```
1 SELECT AVG(precio) AS promedio FROM servicios INNER JOIN ordenes ON ordenes.id_servicio=servicios.id;
```

Data Output Explain Messages Notifications

	promedio
	double precision
1	72.8571428571429