Universidad de San Carlos de Guatemala
Facultad de Ingeniería
Sistemas de bases de datos 2
Ingeniería en Ciencias y Sistemas

PRACTICA 2

Integrantes	Carné
Cesar Leonel Chamale Sican	201700634
Bryan Eduardo Gonzalo Méndez Quevedo	201801528
Oscar Daniel Oliva España	201902663

Guatemala 30 de septiembre del 2023

SOLUCIÓN:

- **Análisis de los resultados obtenidos:**

Para el volumen de datos que contiene la base de datos ambos tipos de backups son rápidos. El full backup garantiza que toda la información correspondiente diaria se encuentra en una versión estable. Aunque el tamaño de este mismo o tiempo para realizarlo puede llegar a ser muy grande, cuando se tienen demasiados datos en las tablas. El backup incremental puede funcionar bastante para una modalidad como la realizada en esta práctica, pues trata de backup diarios, de forma que se van copiando todos los cambios realizados diariamente.

Los tiempos para restauran resultaron muy rápidos, para ambos backups, a continuación, se muestra una aproximación:

Dia	Tiempo de Restauración Full Backup (s)	Tiempo de restauración Incremental Backup (s)
1	0.89	2.99
2	5.40	3.12
3	5.23	1.67
4	6.82	7.59
5	7.10	4.92

● Conclusión

- Un full backup se puede realizar fácilmente y permite acceso fácil a la última versión de este. Pero puede llegar a requerir bastante tiempo ya que copia todo.

- A medida que la cantidad de datos en las tablas aumenta, es probable que el tiempo necesario para realizar un full backup también crezca. Desde una perspectiva de diseño de sistemas, sería esencial considerar cómo se escala el proceso a medida que aumenta la carga de datos, particularmente para backups completos.

- El backup incremental, al copiar sólo los cambios realizados, minimiza la redundancia y, por lo tanto, puede ser una solución más eficiente en términos de almacenamiento y tiempo de restauración.

- Si alguna versión del backup incremental falla, la información puede quedar totalmente incompleta para versiones posteriores.

- Si se requiere una recuperación rápida y se cuenta con espacio de almacenamiento limitado, el backup incremental podría ser preferido.

- Para este caso, es más recomendable un backup incremental, siempre teniendo cuidado de que se guarde bien cada versión (día), de esta forma se tiene bien segmentado lo que se hizo diariamente y se ocupará menos espacio los backups en comparación a uno full.

Bitácora

Creación de Backups:

DIA 1:

Carga de datos de habitación

```
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server
8.0/Uploads/Habitaciones.csv' INTO TABLE habitacion FIELDS TERMINATED BY ','
LINES TERMINATED BY '\n' IGNORE 1 ROWS;
```

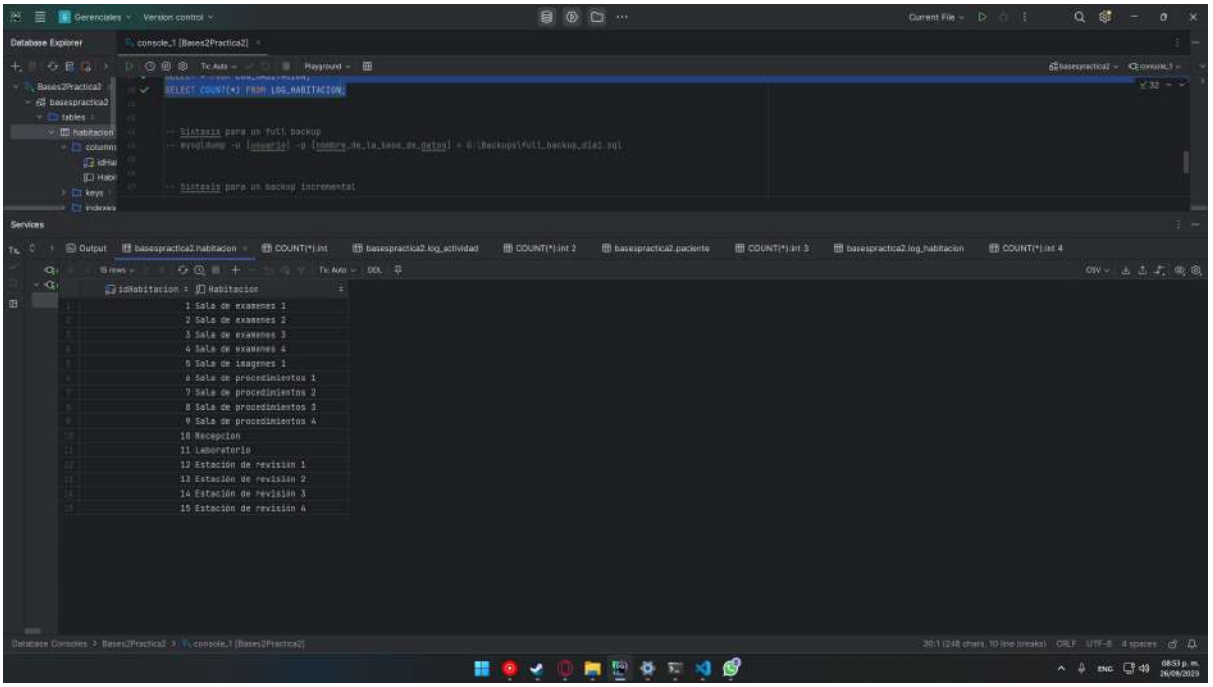
Comandos para backup completo

```
-- mysqldump -u root -p basespractica2 > G:\Backups\full_backup_dia1.sql
```

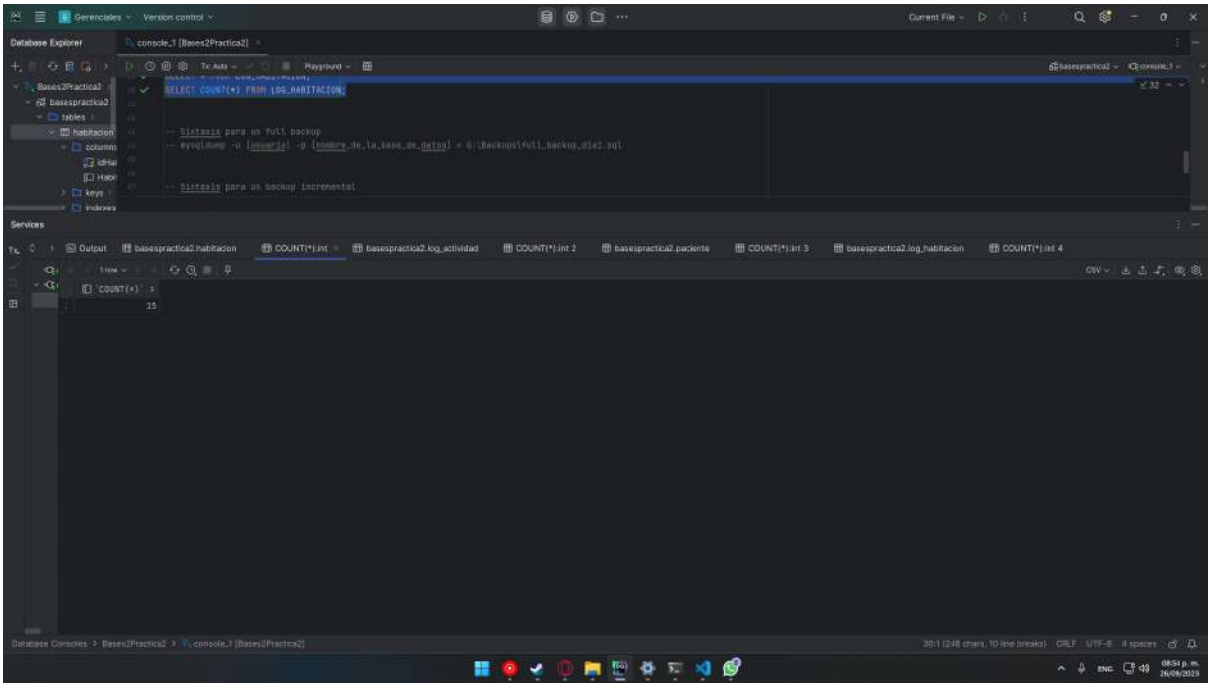
Comandos para backup Incremental

```
-- mysqldump -u root -p basespractica2 habitacion >
G:\Backups\incremental_backup_dia1.sql
```

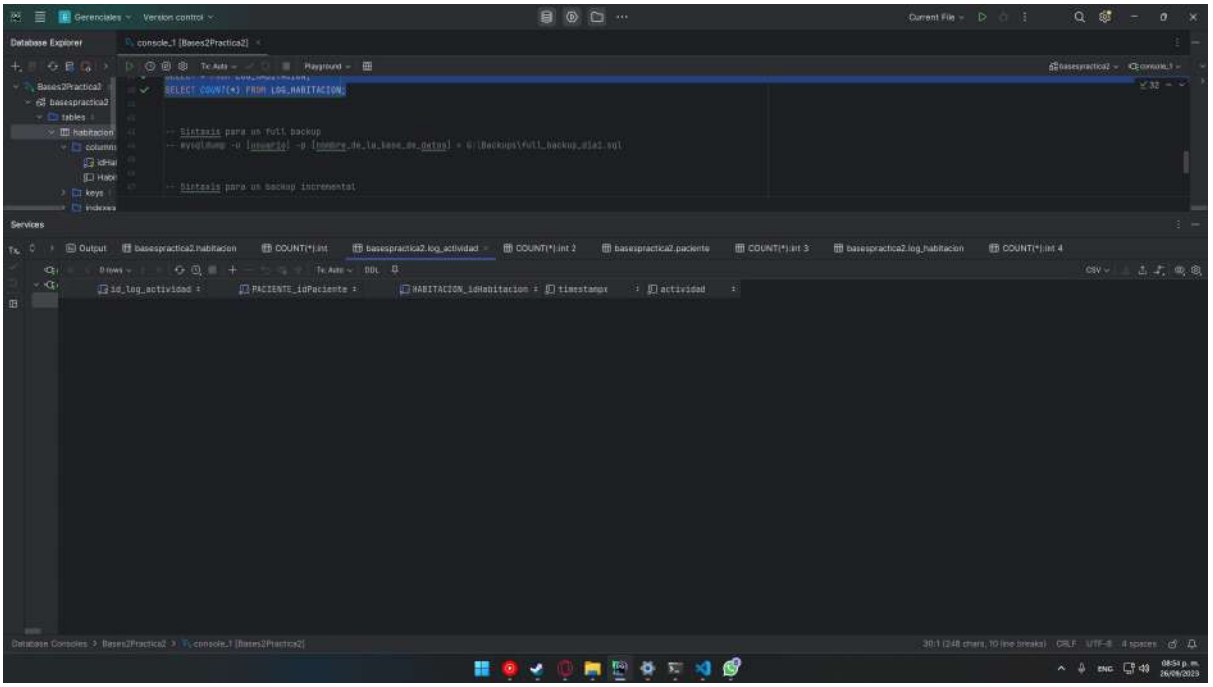
SELECT * FROM habitacion



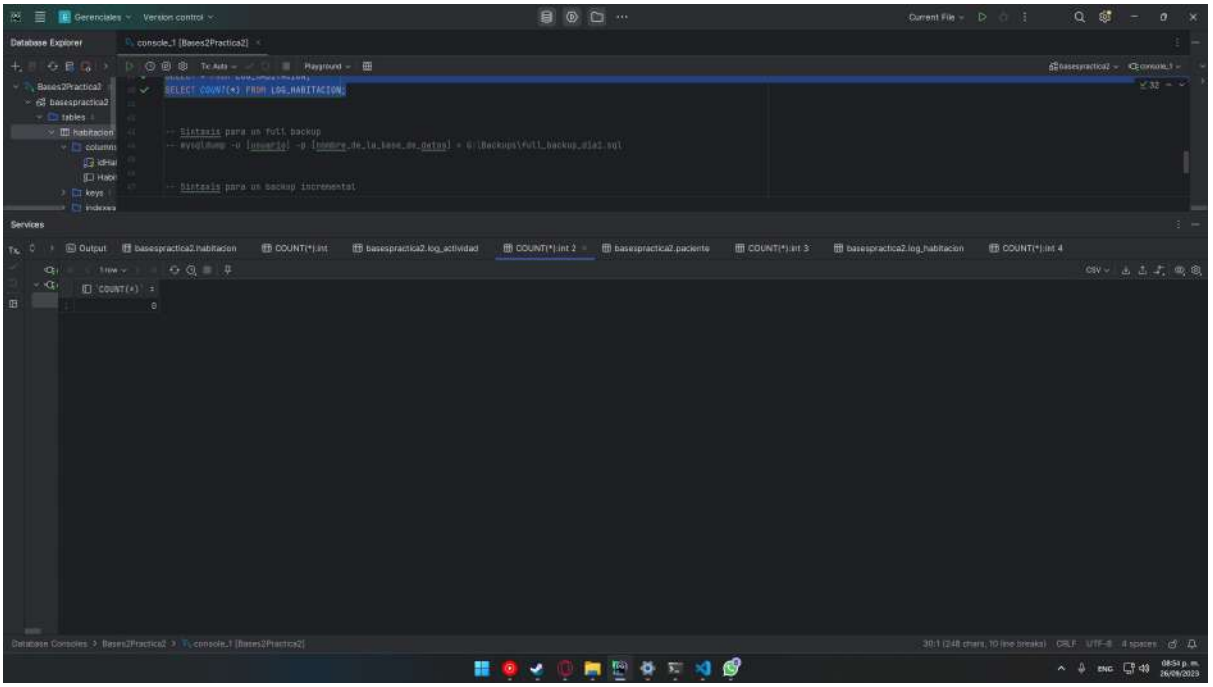
SELECT COUNT(*) FROM habitacion



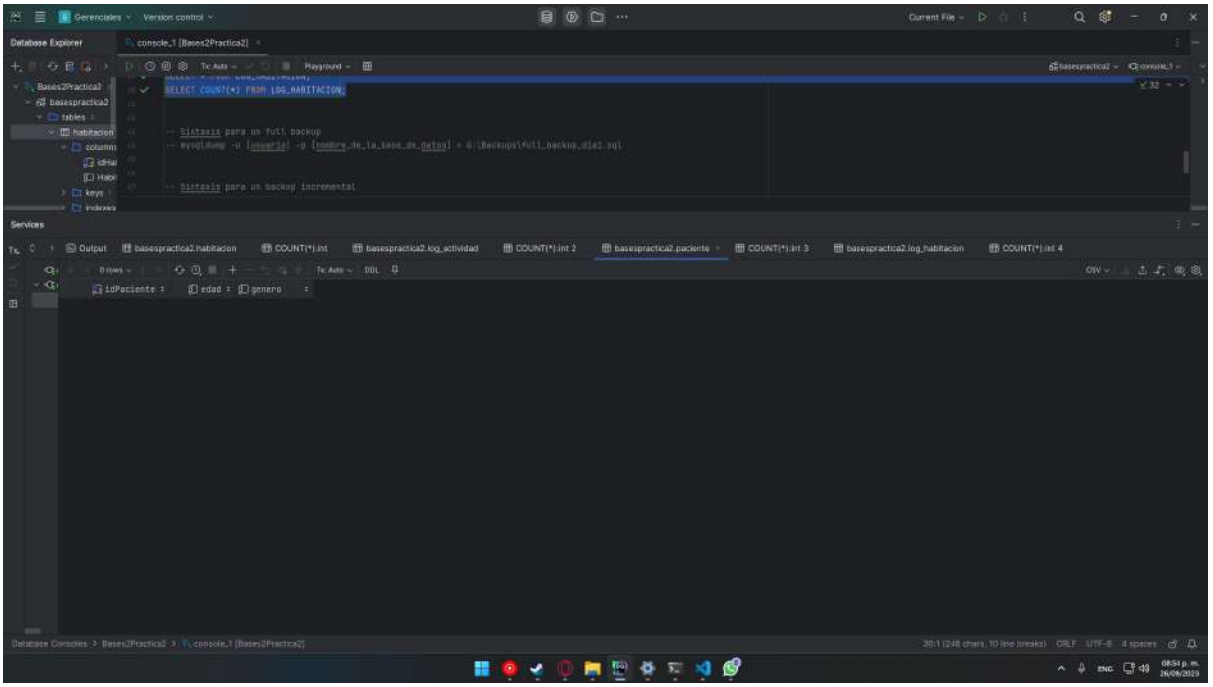
SELECT * FROM log_actividad



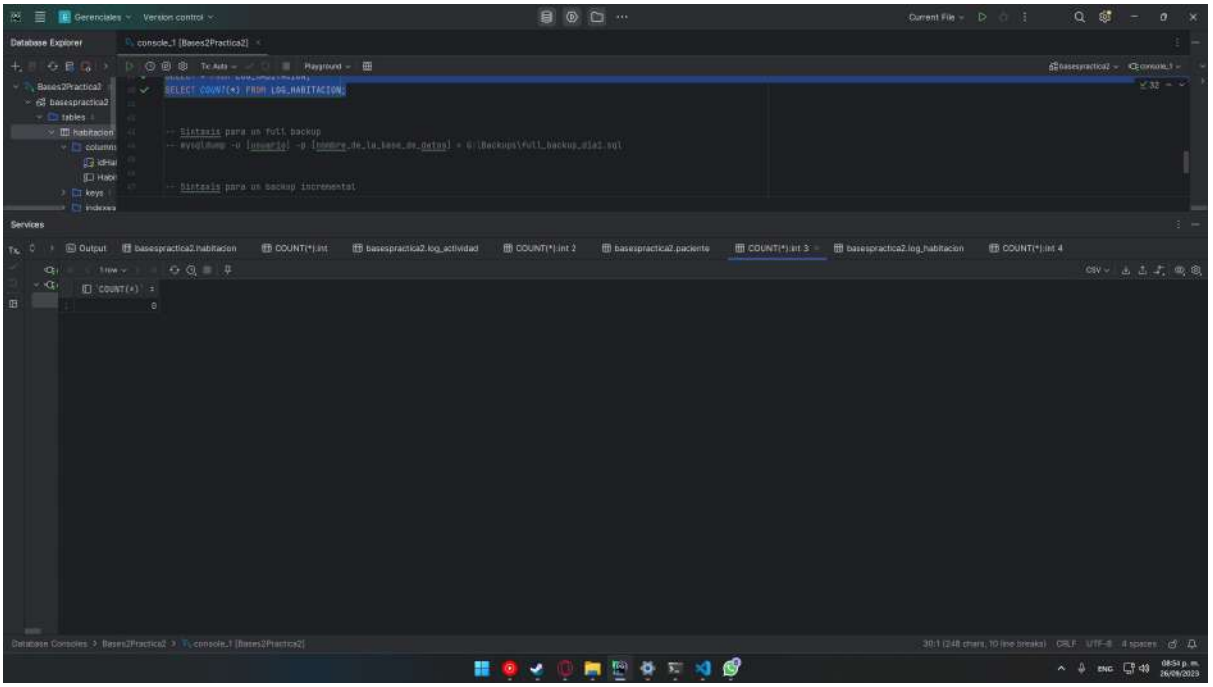
SELECT COUNT(*) FROM log_actividad



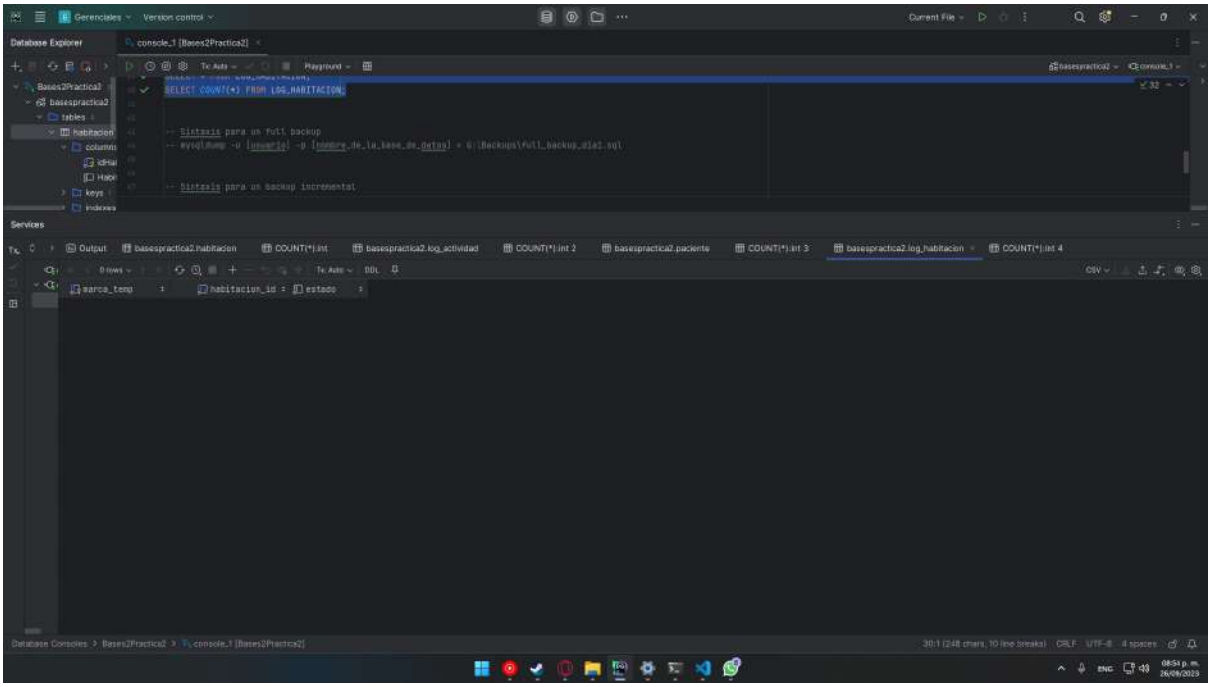
SELECT * FROM paciente



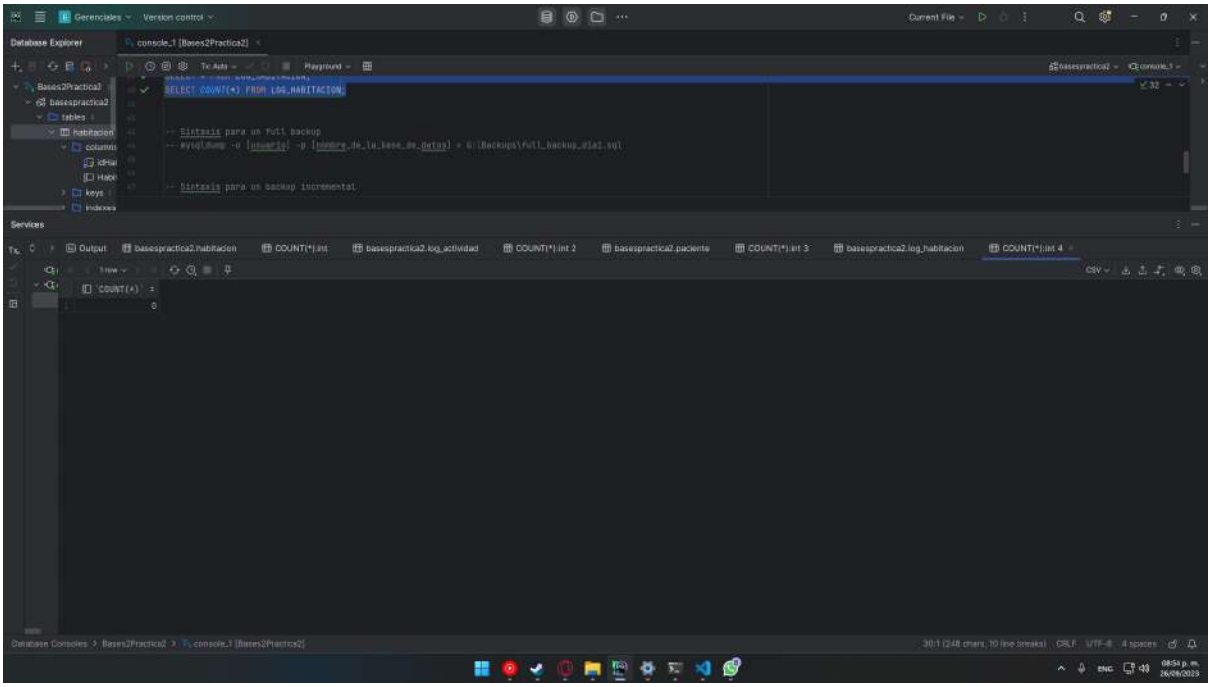
SELECT COUNT(*) FROM paciente



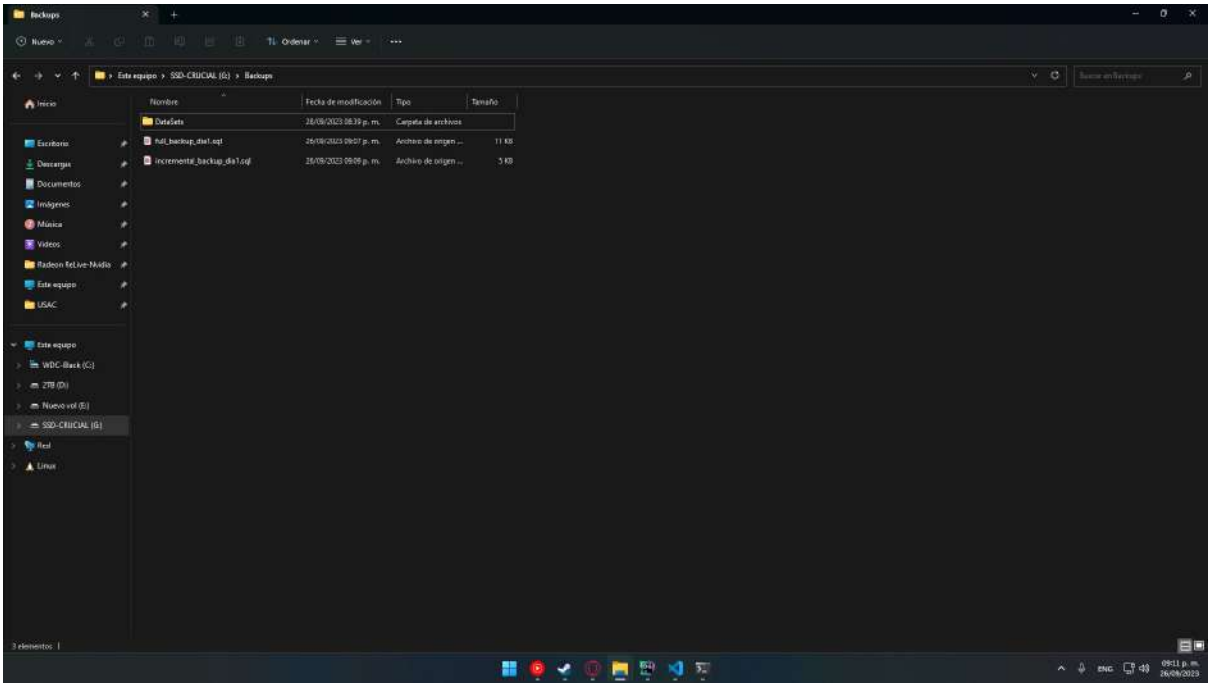
SELECT * FROM log_habitacion



SELECT COUNT(*) FROM log_habitacion



Lista de archivos creados

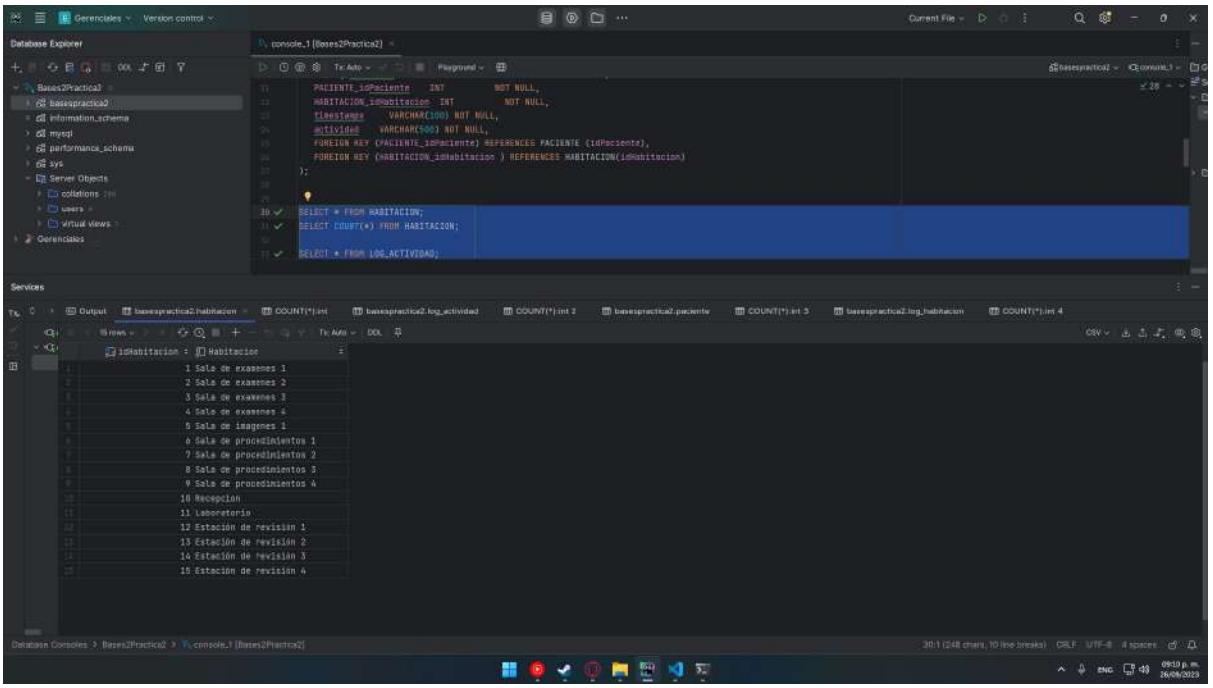


Día 2:

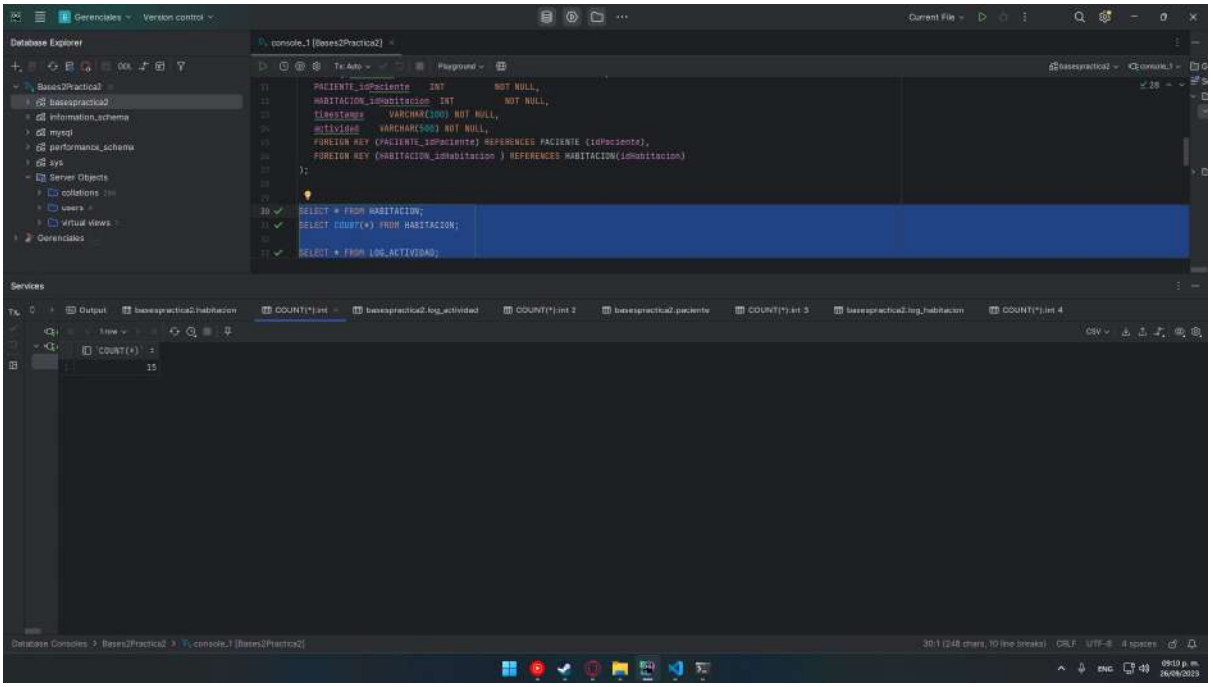
Carga de datos de paciente
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/Pacientes.csv' INTO TABLE paciente FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS;

Comandos para backup completo
-- mysqldump -u root -p basespractica2 > G:\Backups\full_backup_dia2.sql
Comandos para backup Incremental
-- mysqldump -u root -p basespractica2 paciente > G:\Backups\incremental_backup_dia2.sql

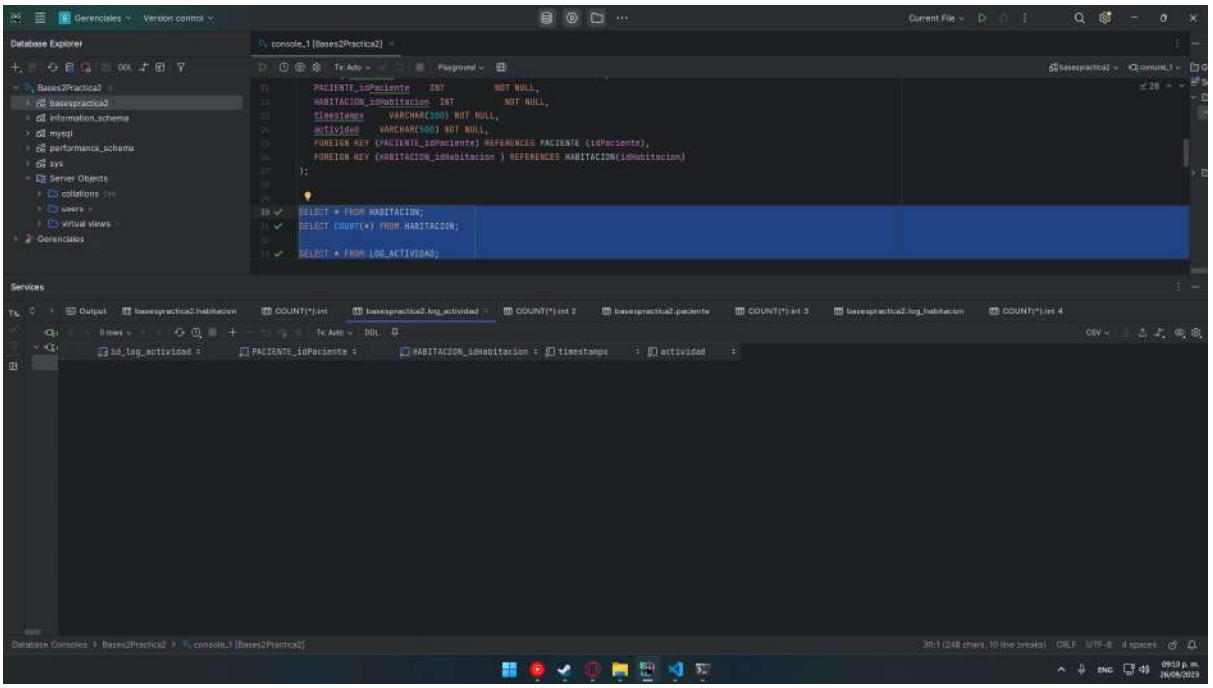
SELECT * FROM habitacion



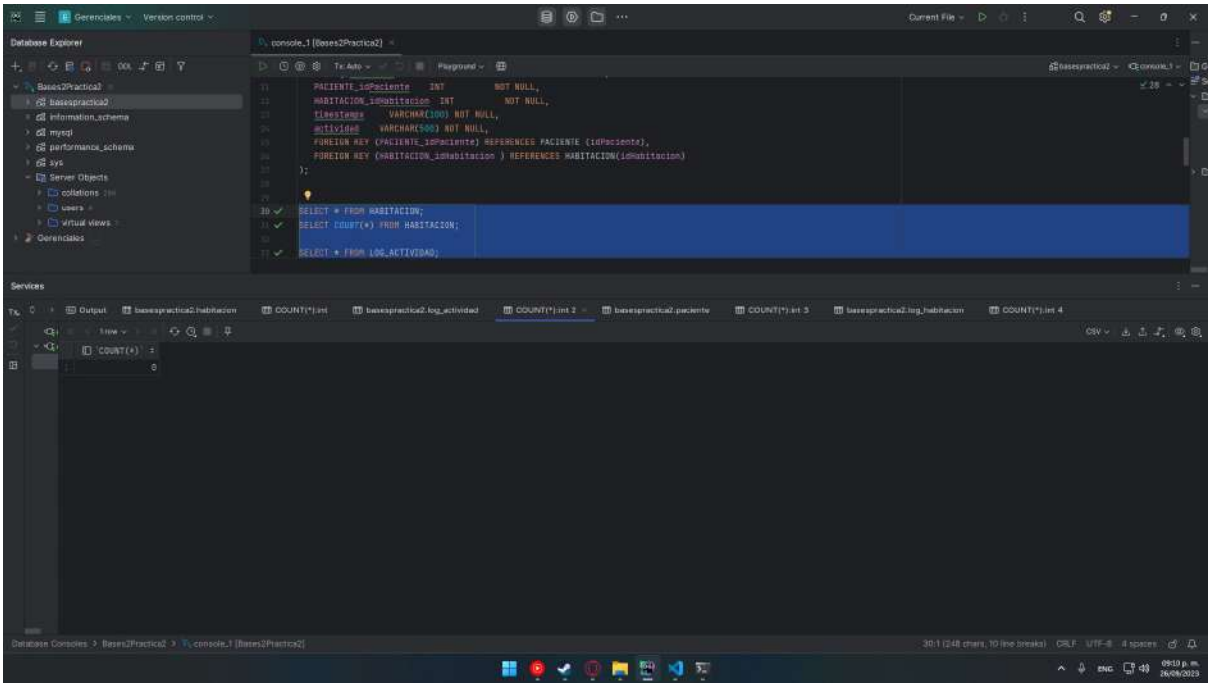
SELECT COUNT(*) FROM habitacion;



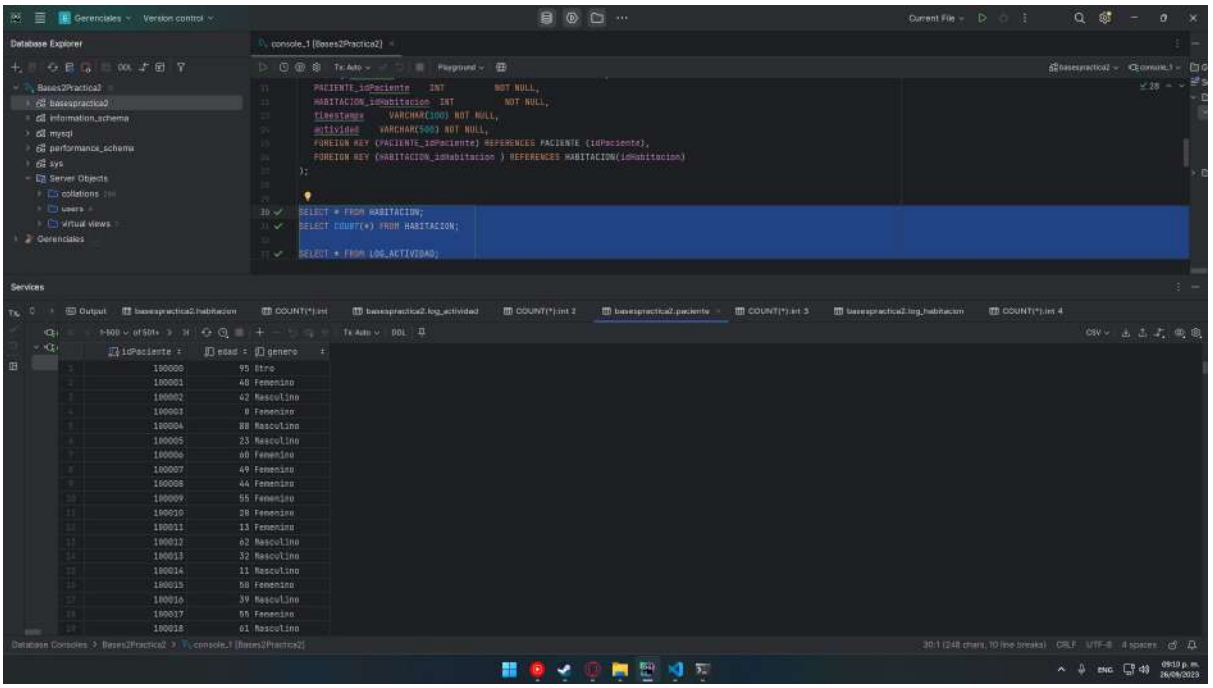
SELECT * FROM log_actividad



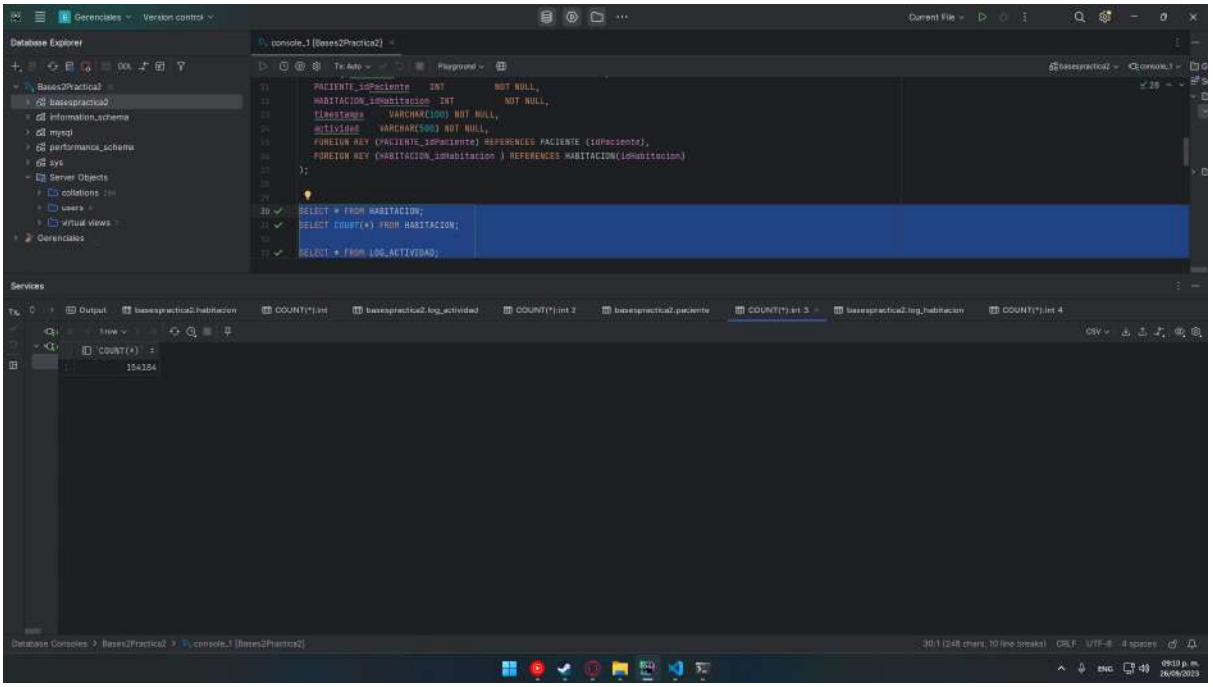
SELECT COUNT(*) FROM log_actividad



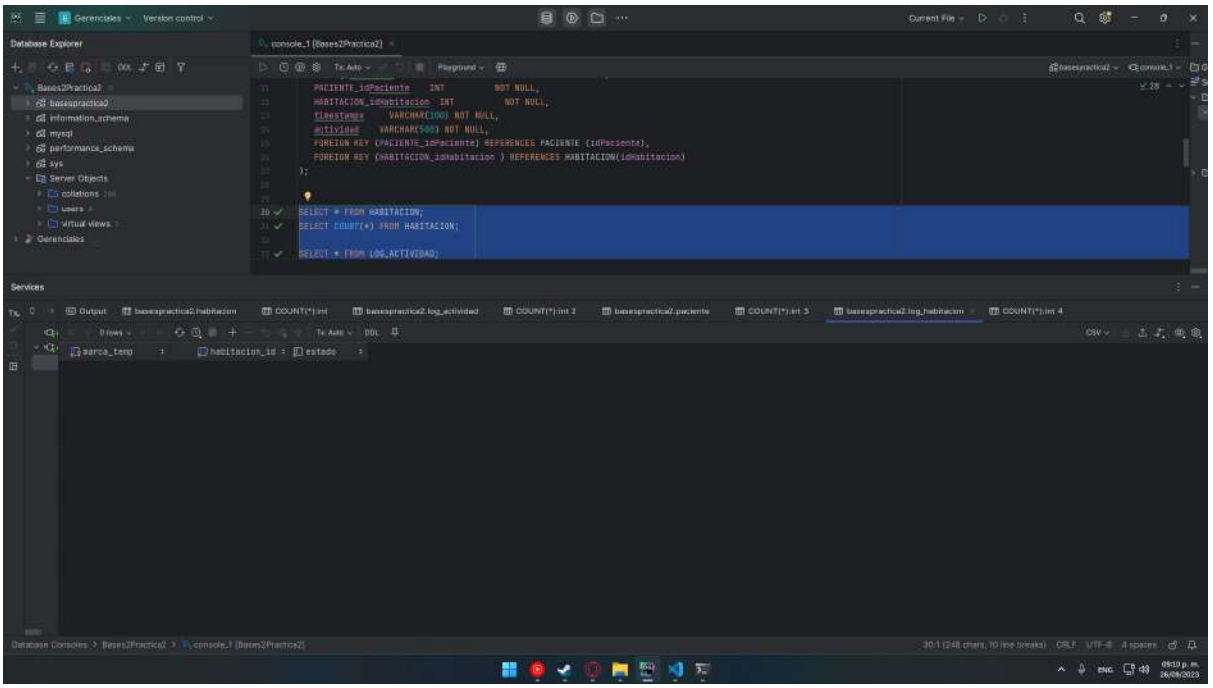
SELECT * FROM paciente



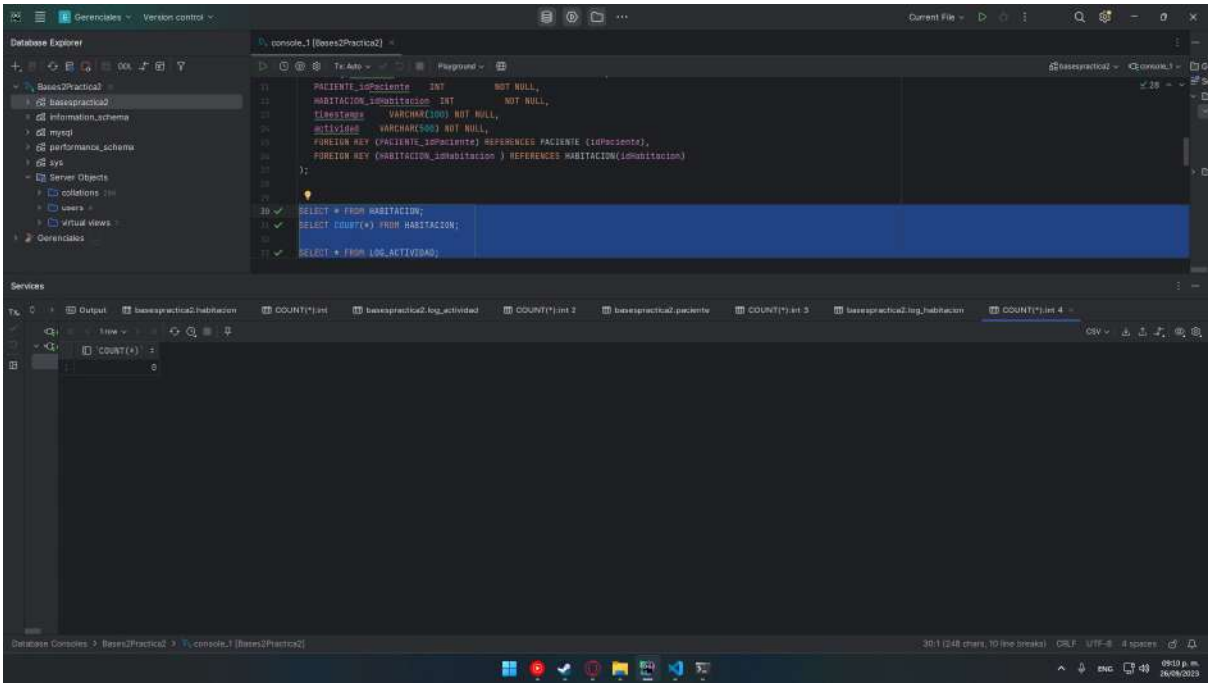
SELECT COUNT(*) FROM paciente



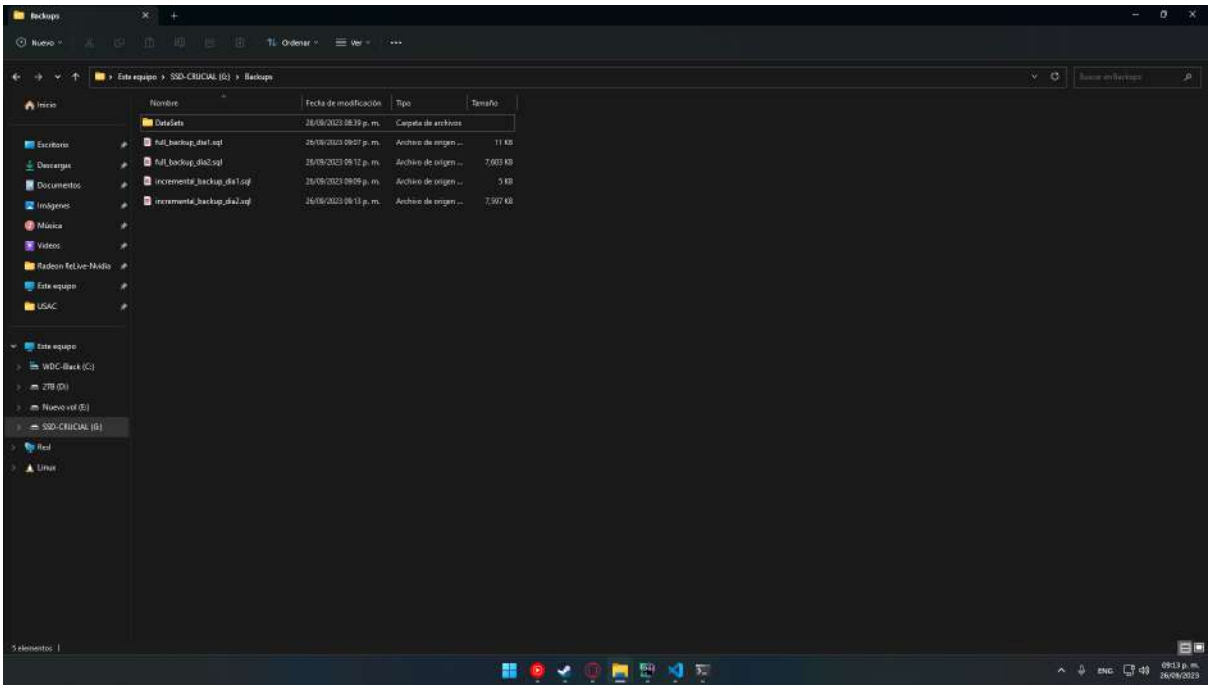
SELECT * FROM log_habitacion



SELECT COUNT(*) FROM log_habitacion



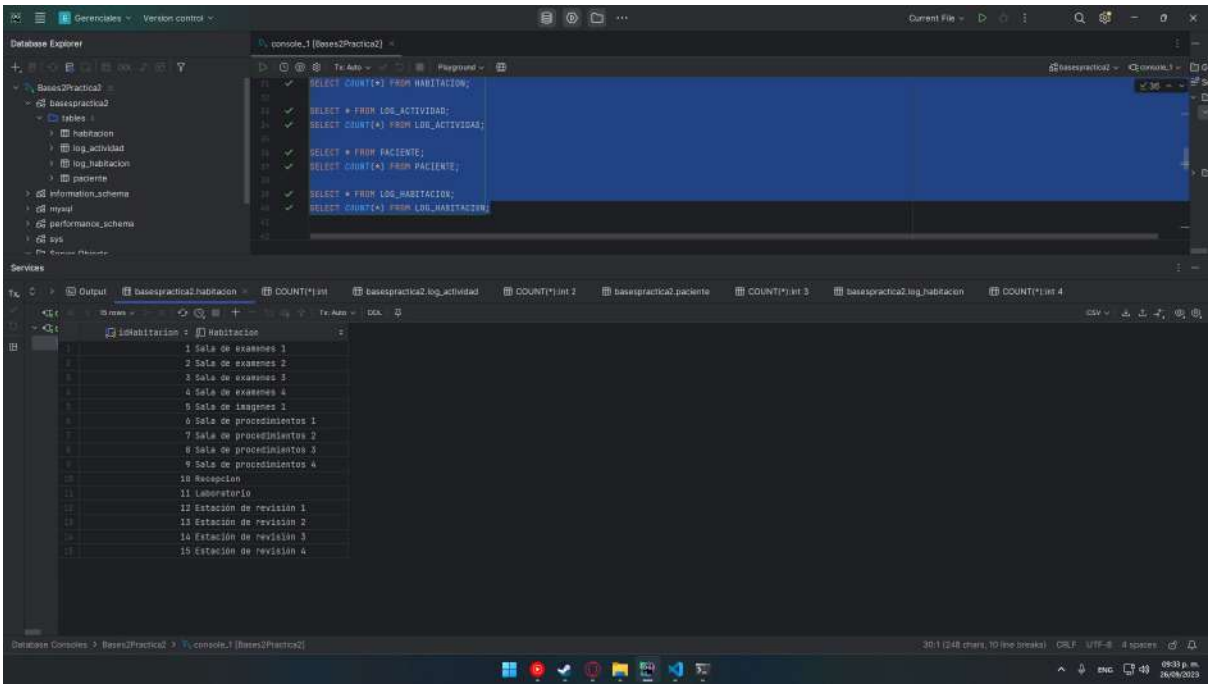
Lista de Archivos creados:



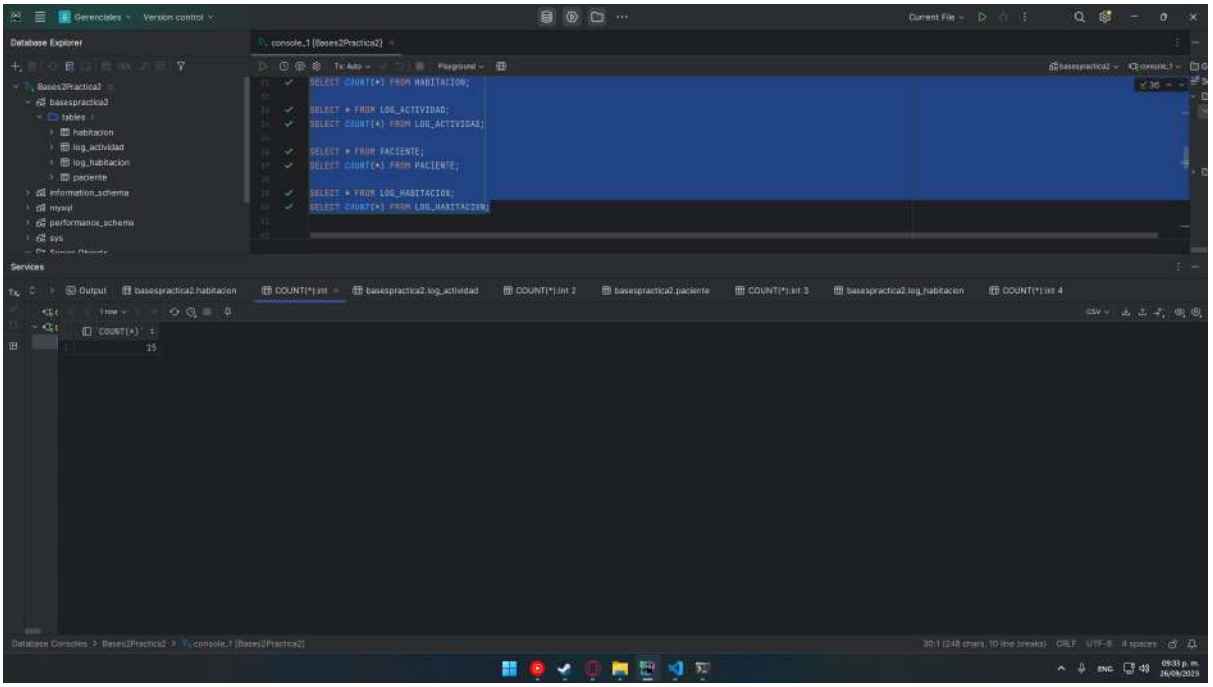
Día 3:
Carga de datos de log_actividad
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogActividades1.csv'
INTO TABLE log_actividad

Comandos para backup completo
-- mysqldump -u root -p basespractica2 > G:\Backups\full_backup_dia3.sql
Comandos para backup Incremental
-- mysqldump -u root -p basespractica2 log_actividad > G:\Backups\incremental_backup_dia3.sql

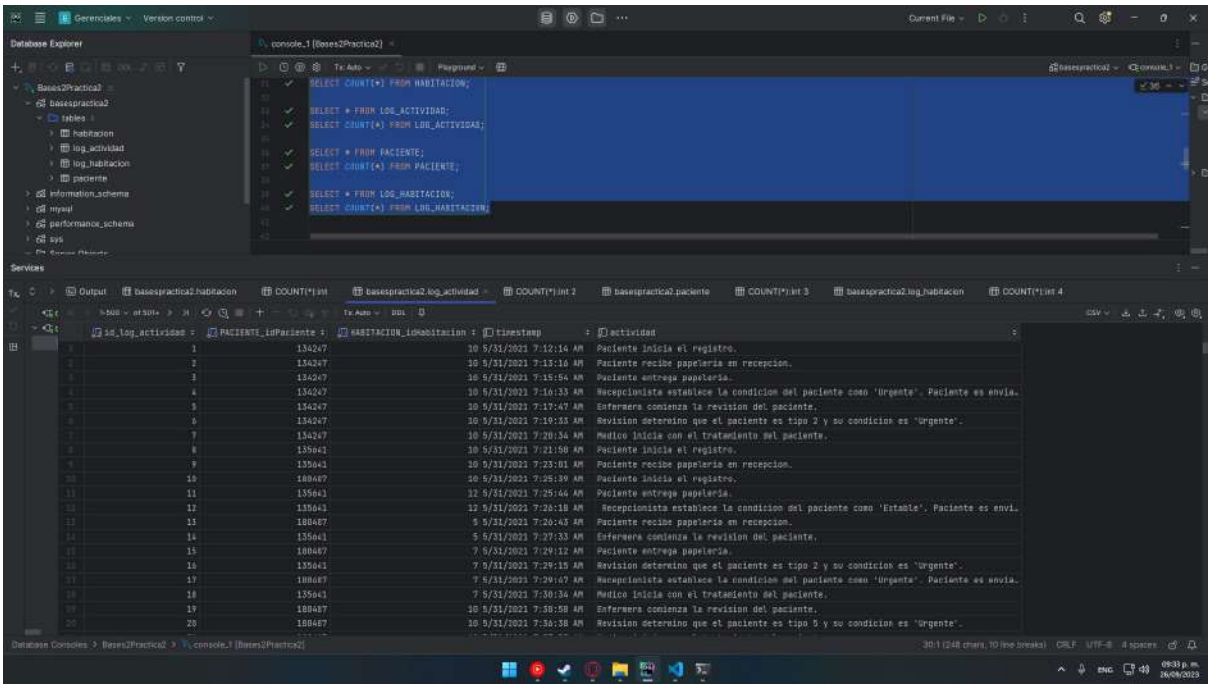
SELECT * FROM habitacion



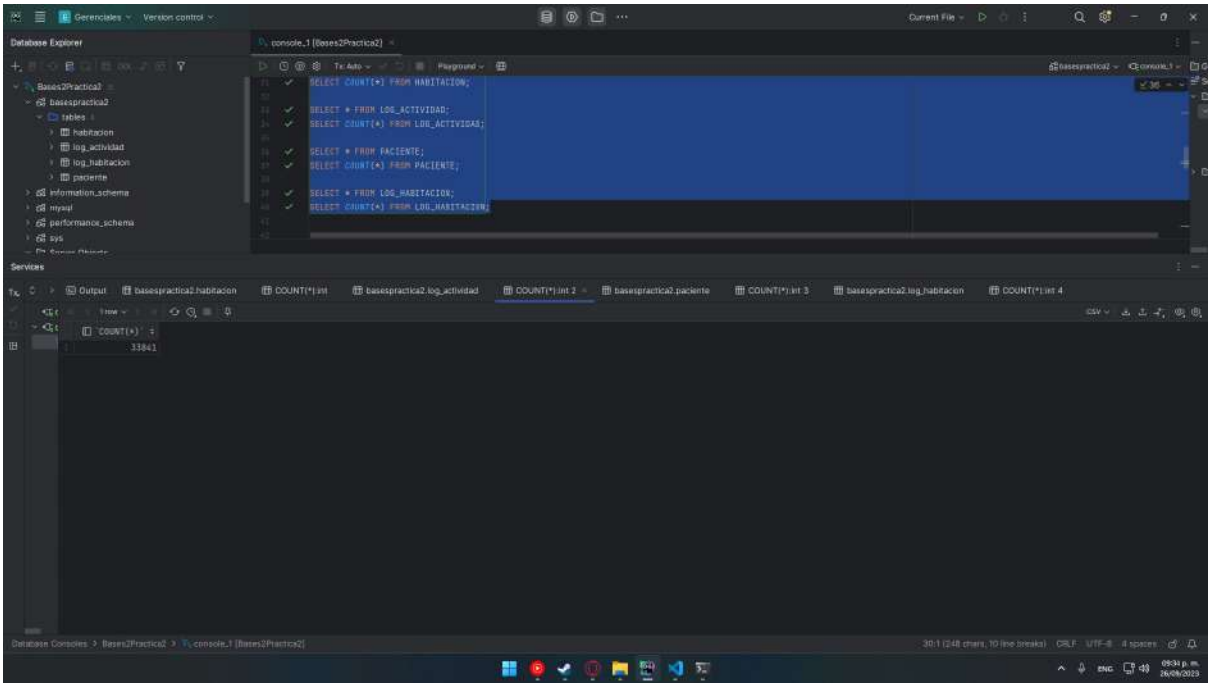
SELECT COUNT(*) FROM habitacion



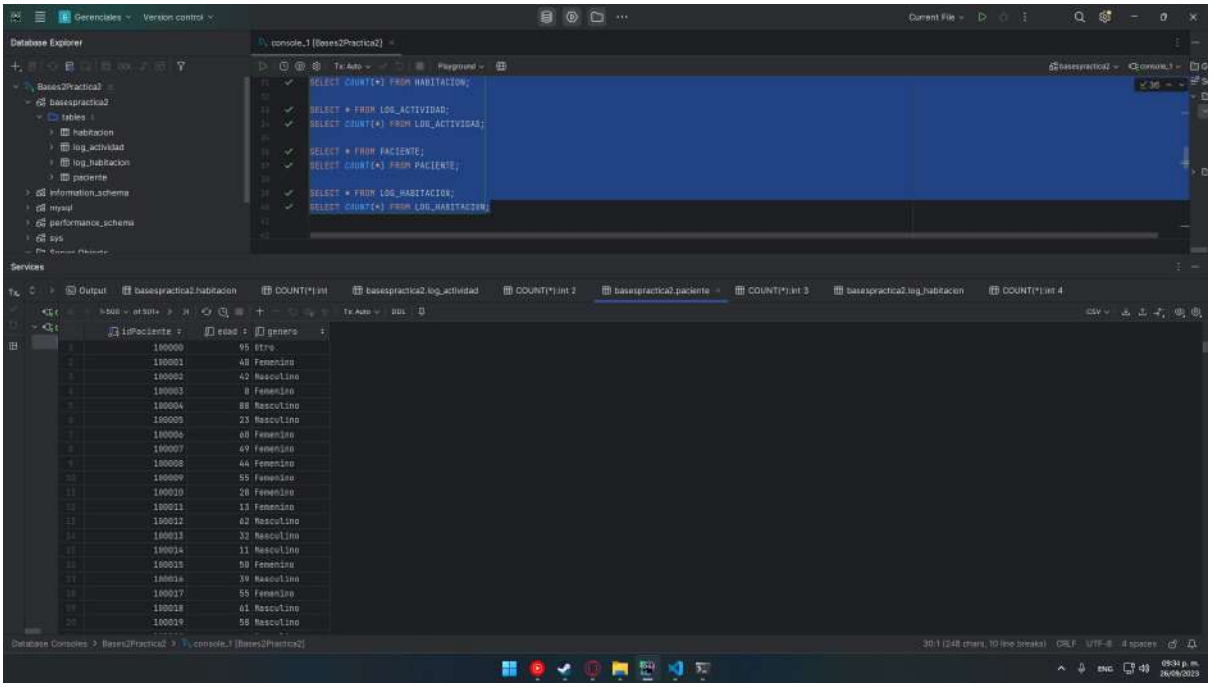
SELECT * FROM log_actividad



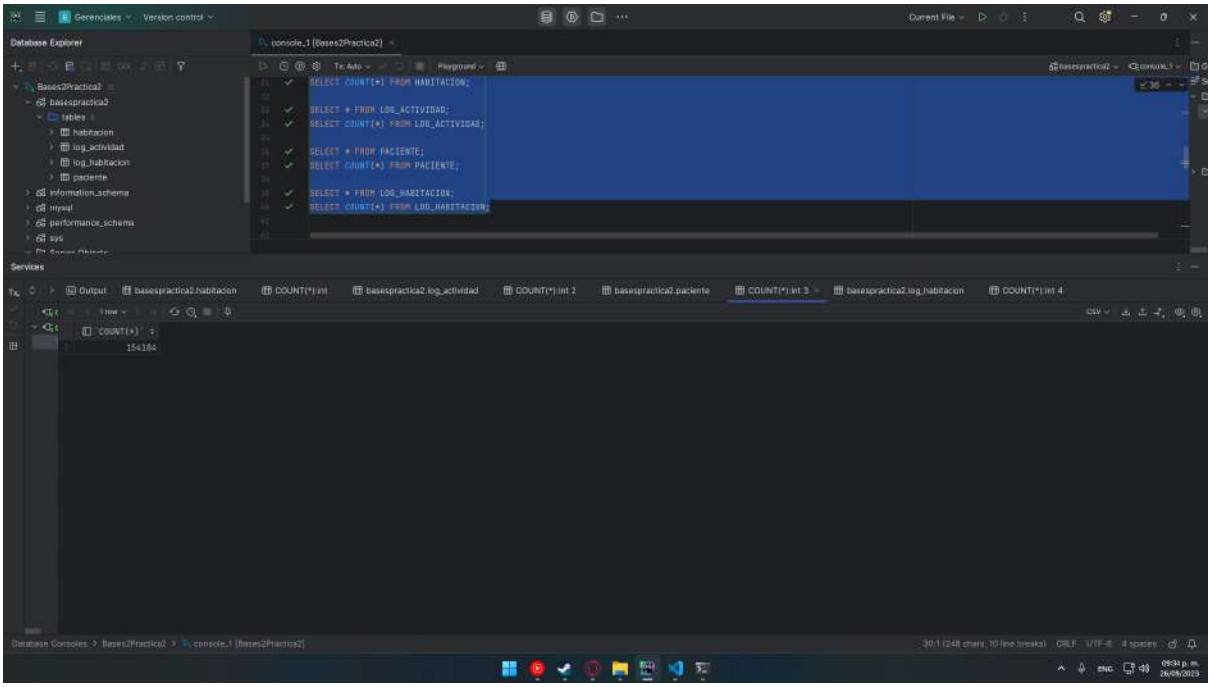
SELECT COUNT(*) FROM log_actividad



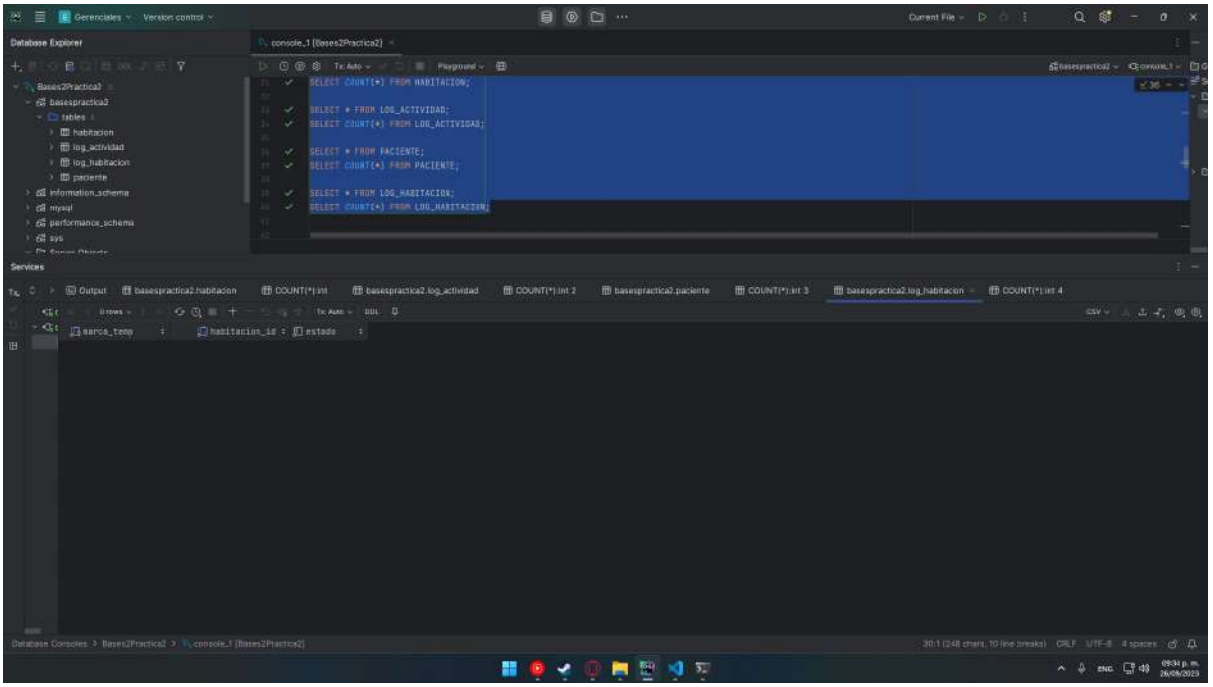
SELECT * FROM paciente



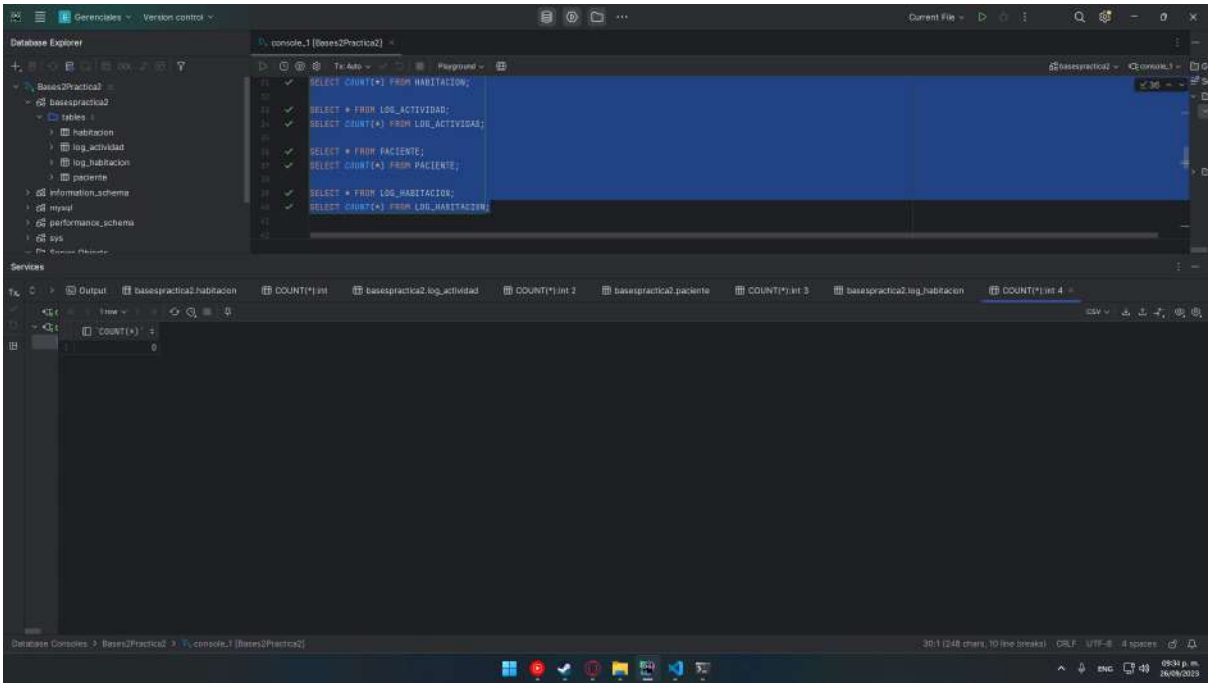
SELECT COUNT(*) FROM paciente



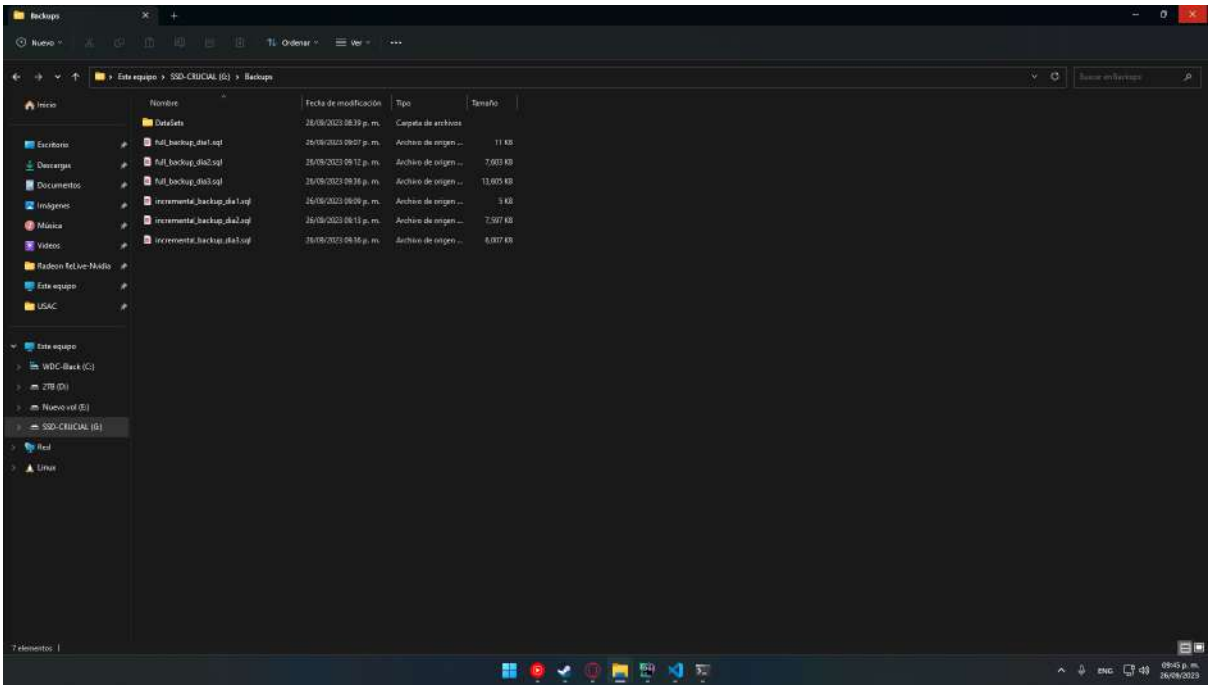
SELECT * FROM log_habitacion



SELECT COUNT(*) FROM log_habitacion



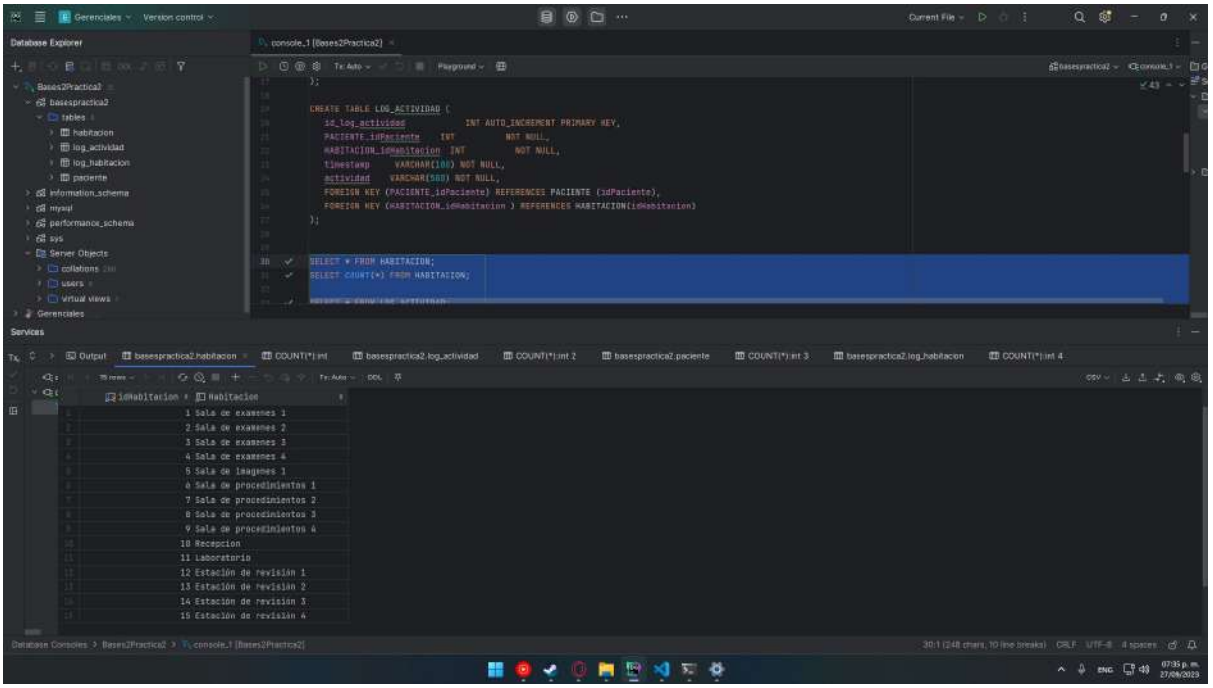
Lista de Archivos creados



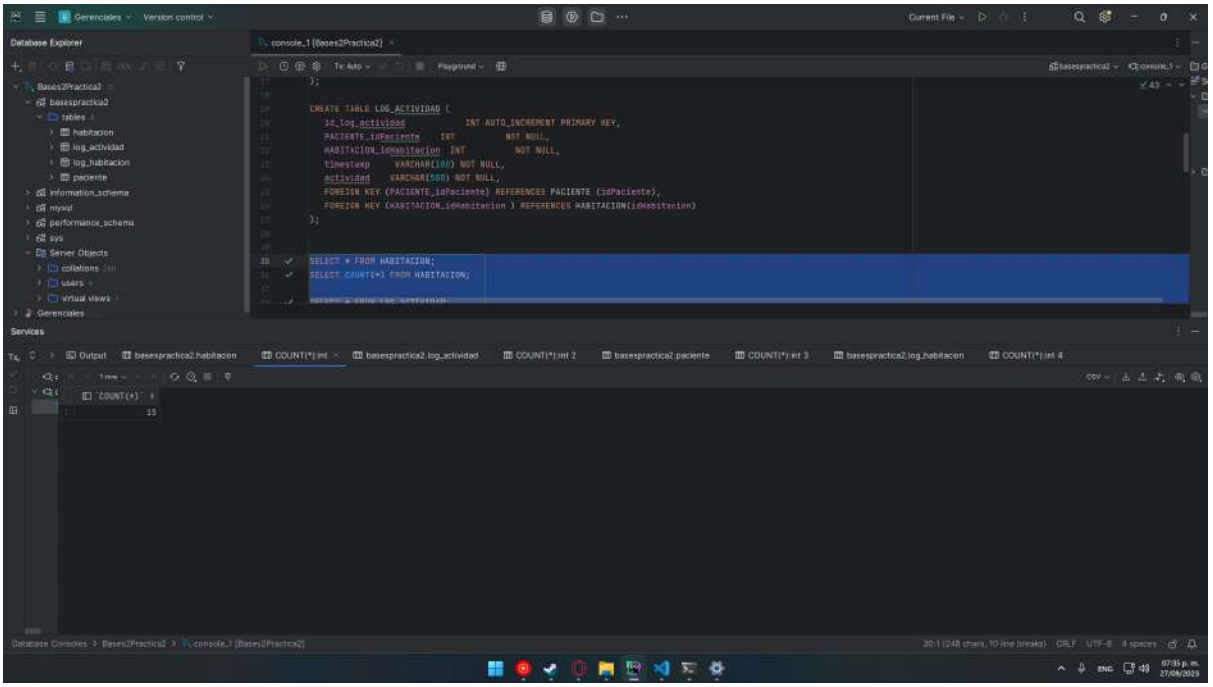
Día 4:
Carga de datos de log_actividad
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogActividades2.csv' INTO TABLE log_actividad FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS (timestamp, actividad, HABITACION_idHabitacion, PACIENTE_idPaciente);

Comandos para backup completo
-- mysqldump -u root -p basespractica2 > G:\Backups\full_backup_dia4.sql
Comandos para backup Incremental
-- mysqldump -u root -p basespractica2 log_actividad --where="id_log_actividad > 33841" > G:\Backups\incremental_backup_dia4.sql

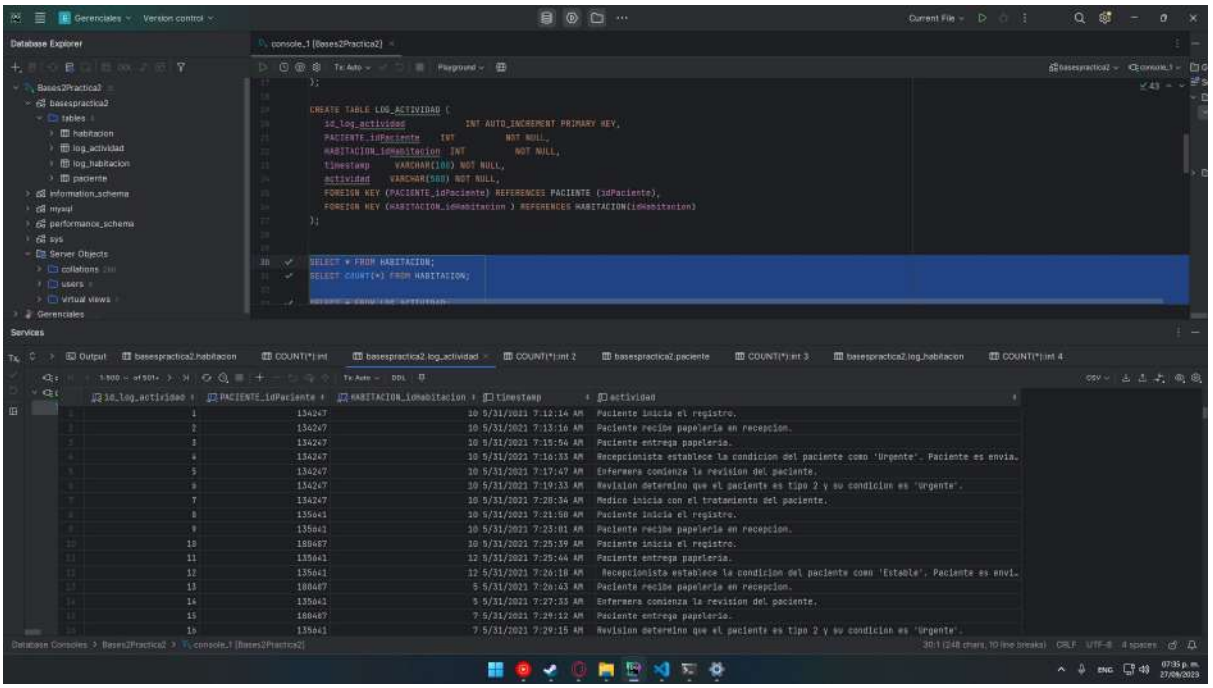
SELECT * FROM habitacion



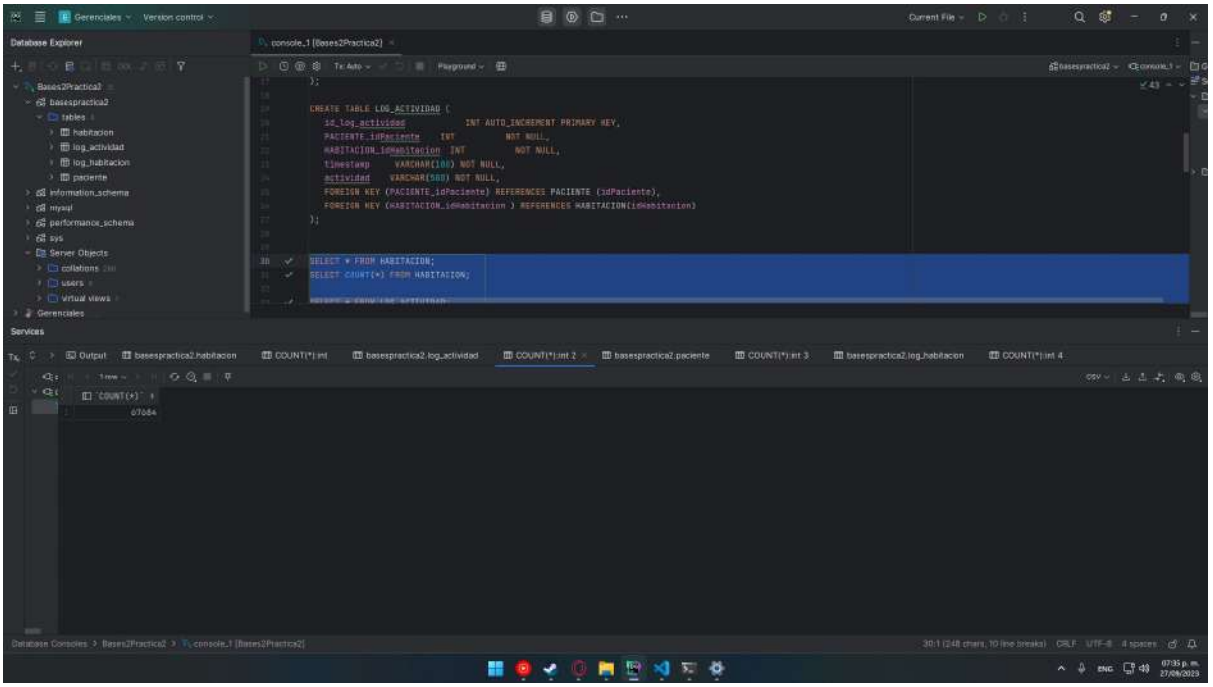
SELECT COUNT(*) FROM habitacion



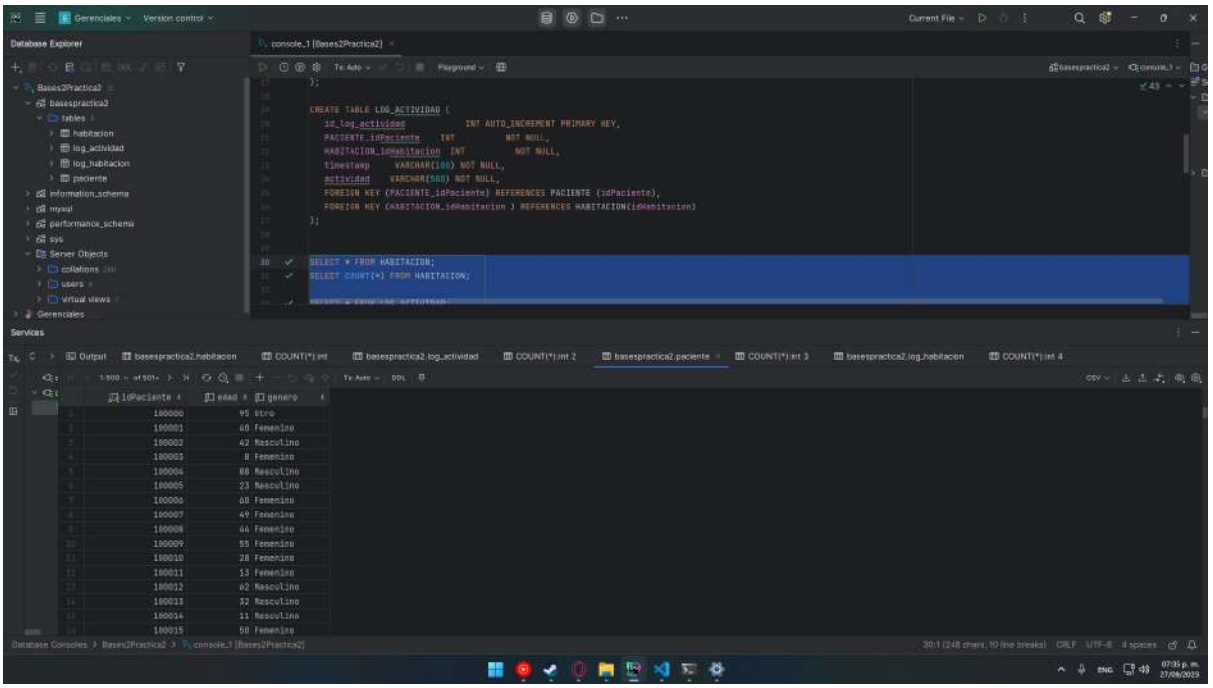
SELECT * FROM log_actividad



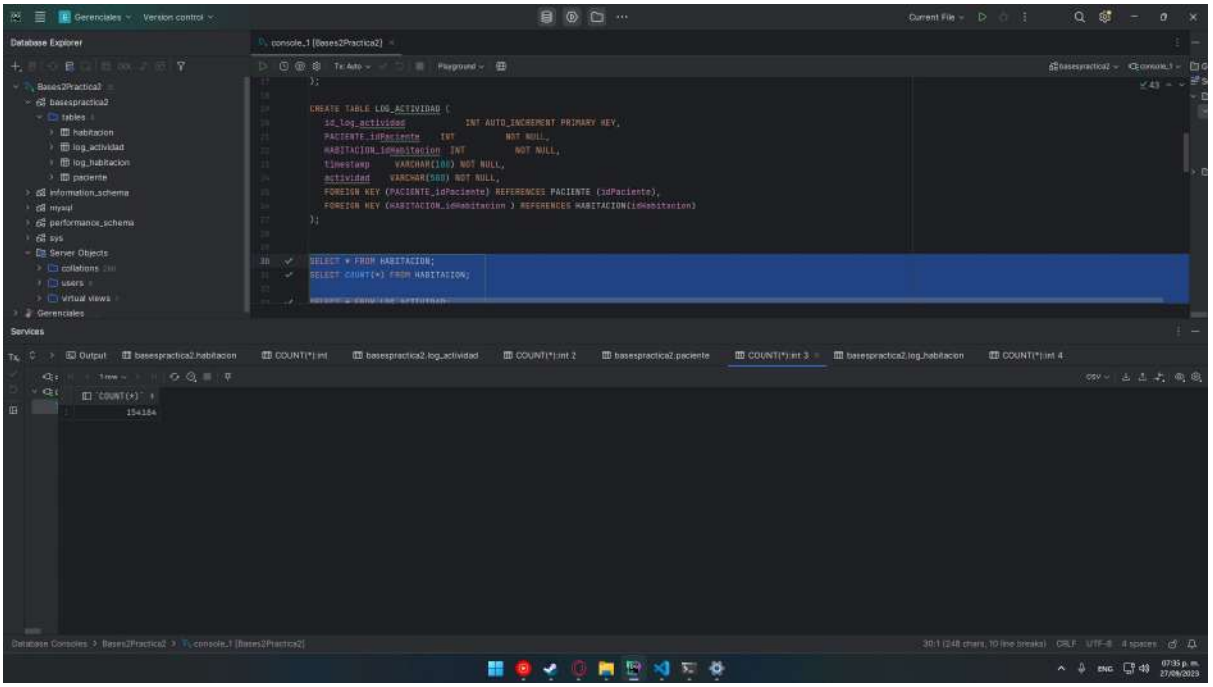
SELECT COUNT(*) FROM log_actividad



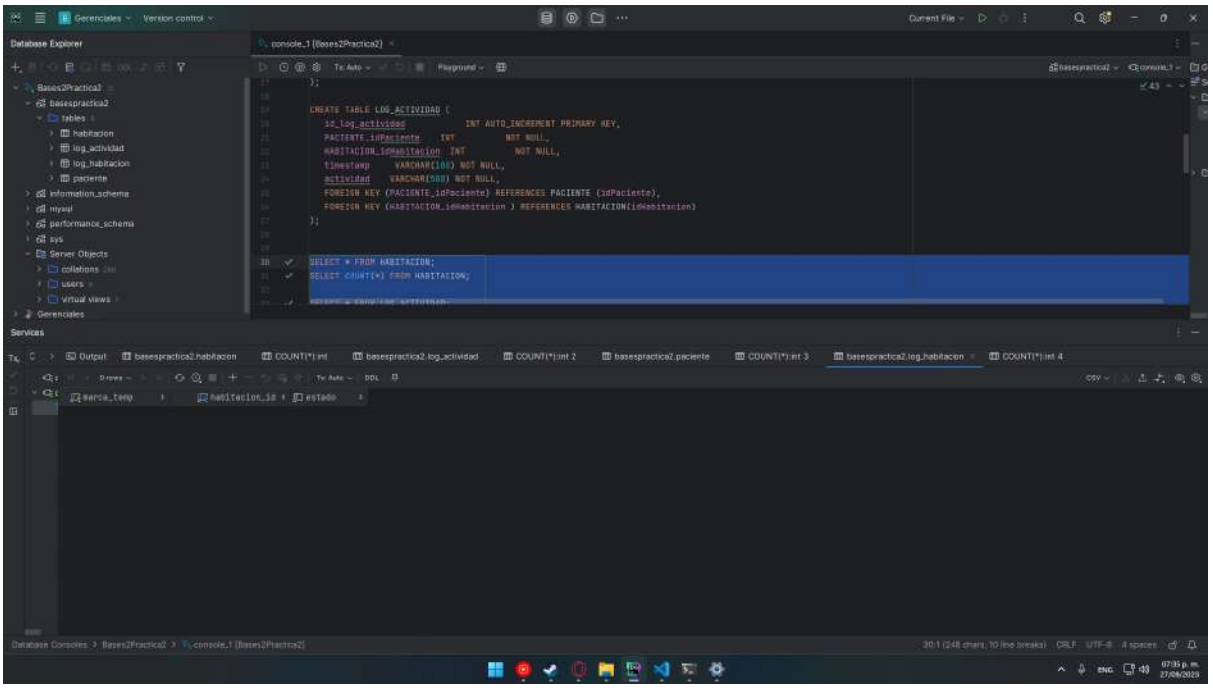
SELECT * FROM paciente



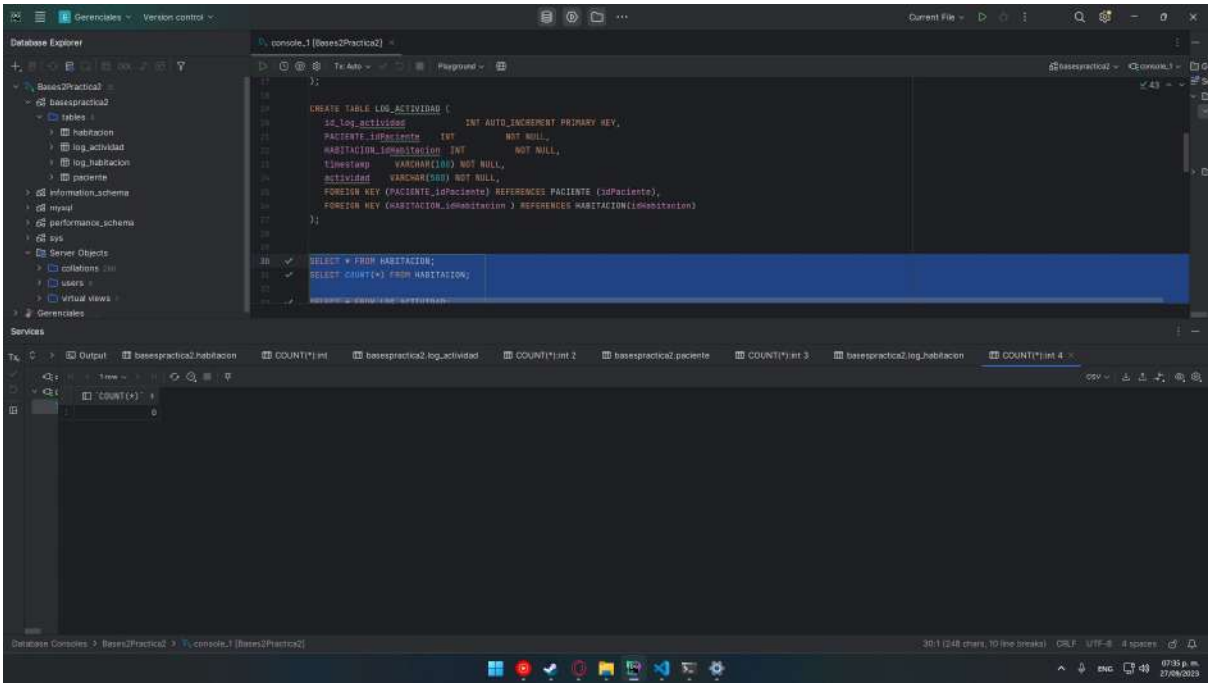
SELECT COUNT(*) FROM paciente



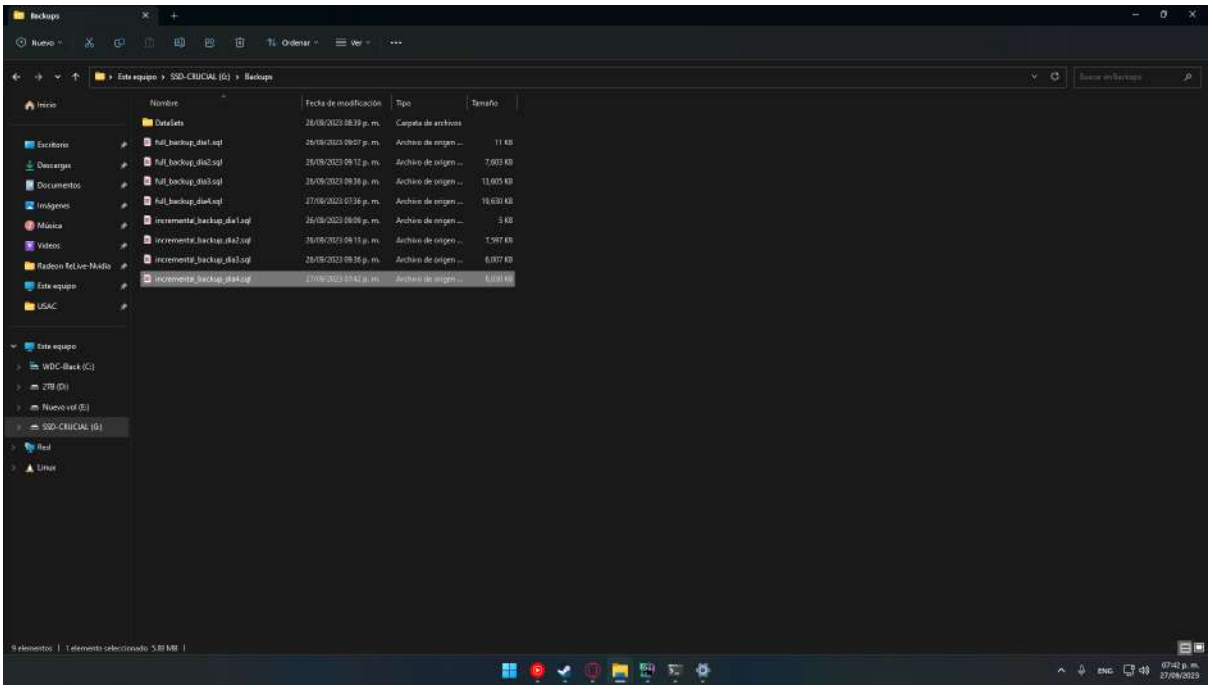
SELECT * FROM log_habitacion



SELECT COUNT(*) FROM log_habitacion



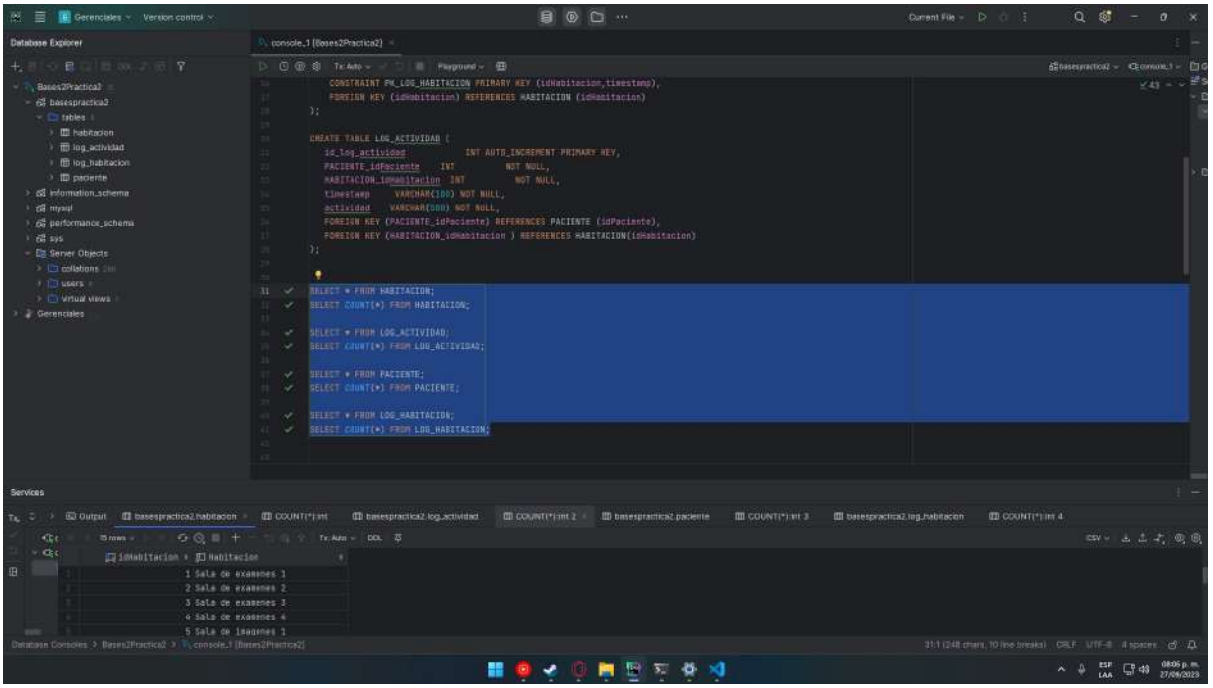
Lista de Archivos creados



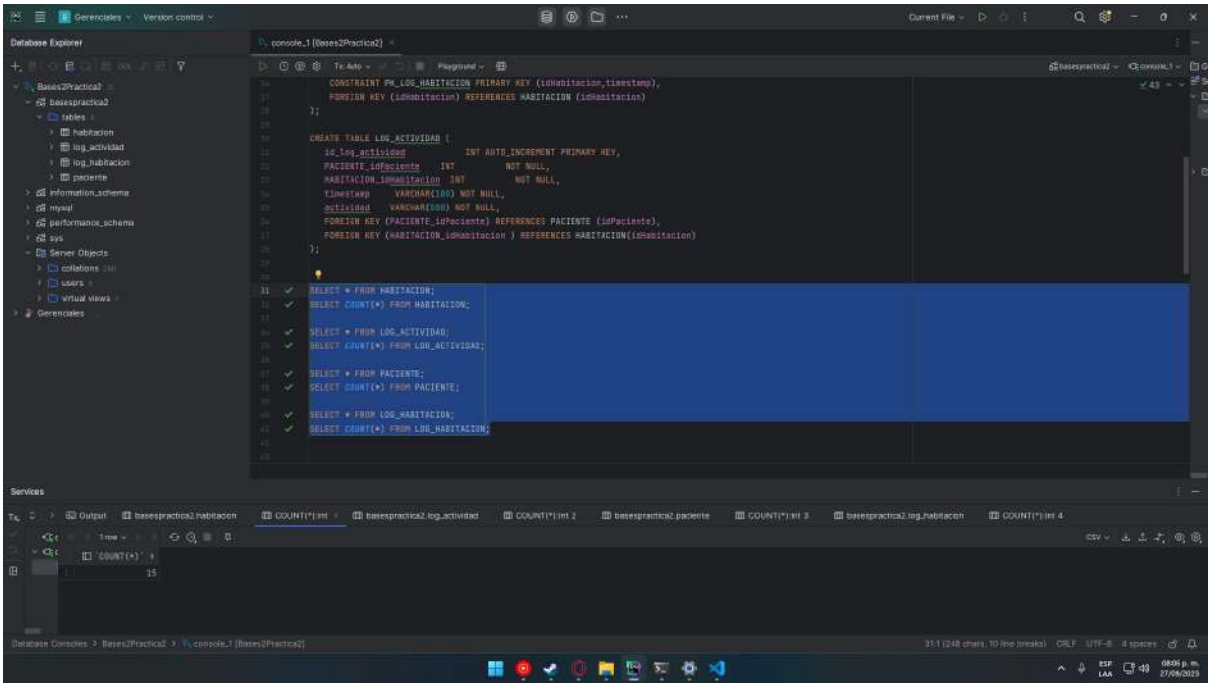
Día 5:
Carga de datos de log_habitacion
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogHabitacion.csv'
INTO TABLE log_habitacion FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS
(idHabitacion, timestamp, status);

Comandos para backup completo
-- mysqldump -u root -p basespractica2 > G:\Backups\full_backup_dia5.sql
Comandos para backup Incremental
-- mysqldump -u root -p basespractica2 log_habitacion > G:\Backups\incremental_backup_dia5.sql

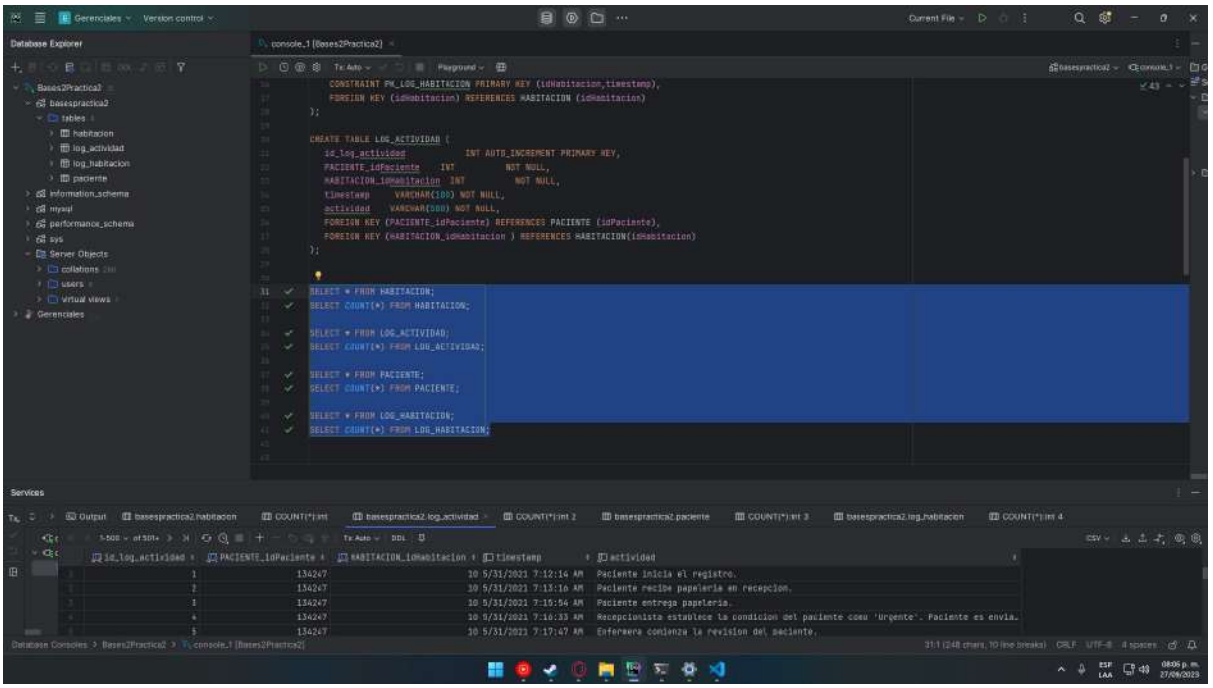
SELECT * FROM habitacion



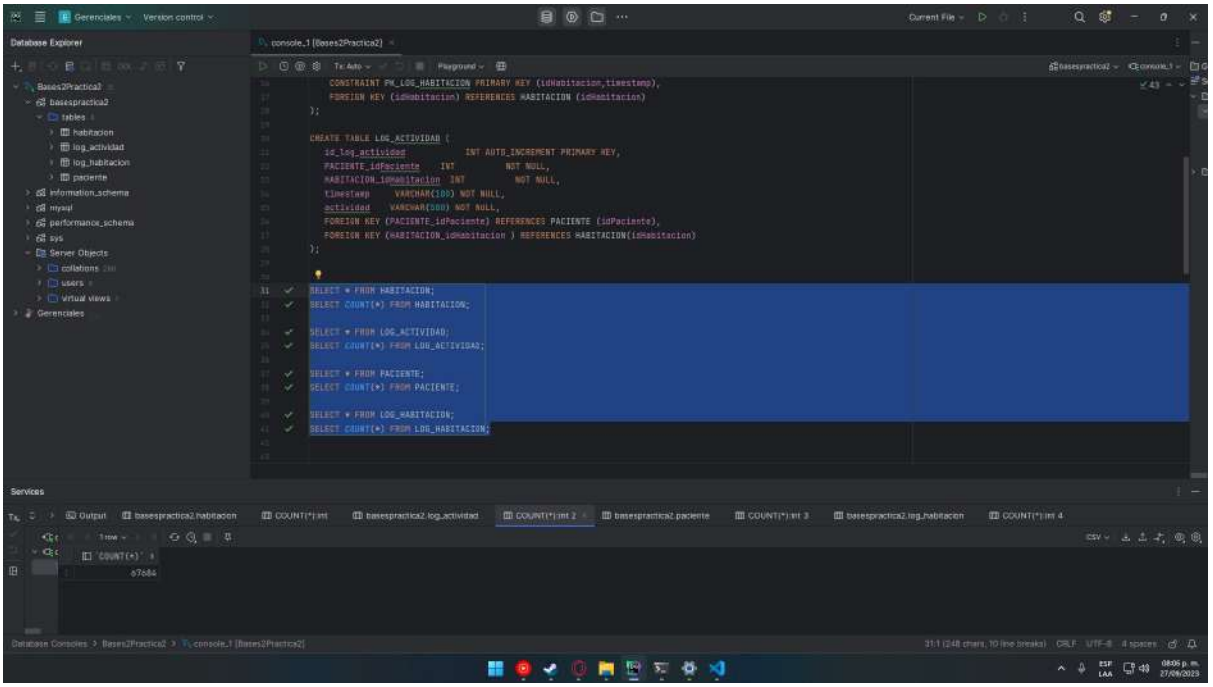
SELECT COUNT(*) FROM habitacion



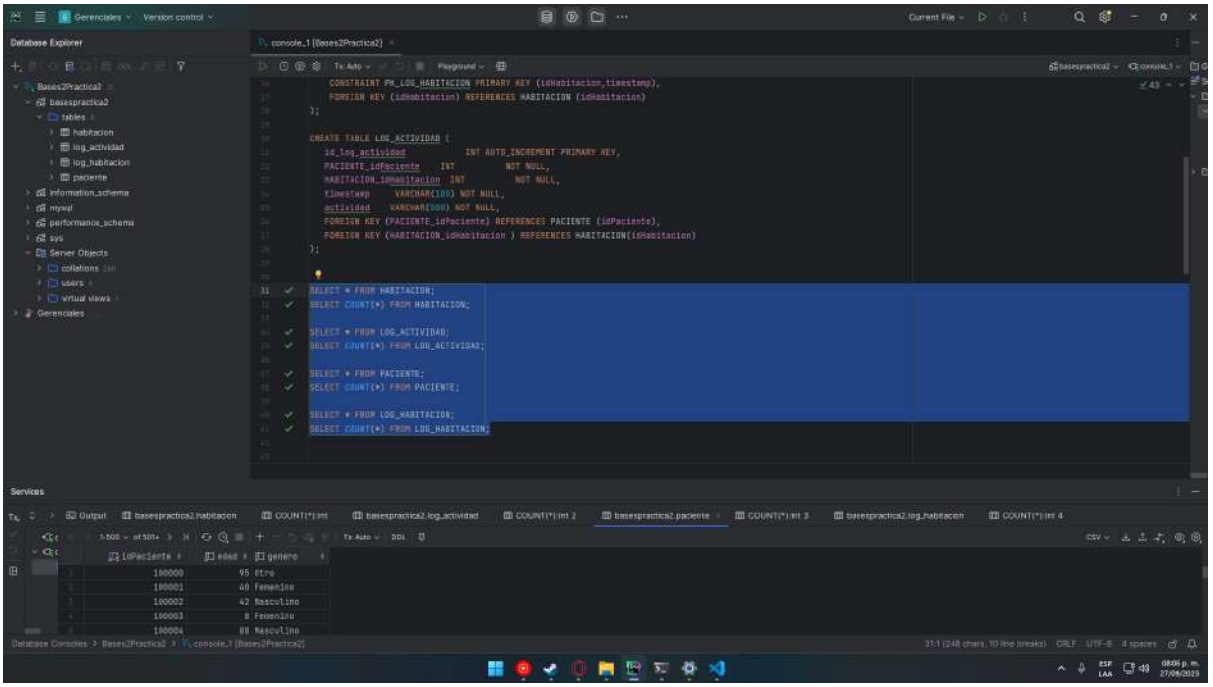
SELECT * FROM log_actividad



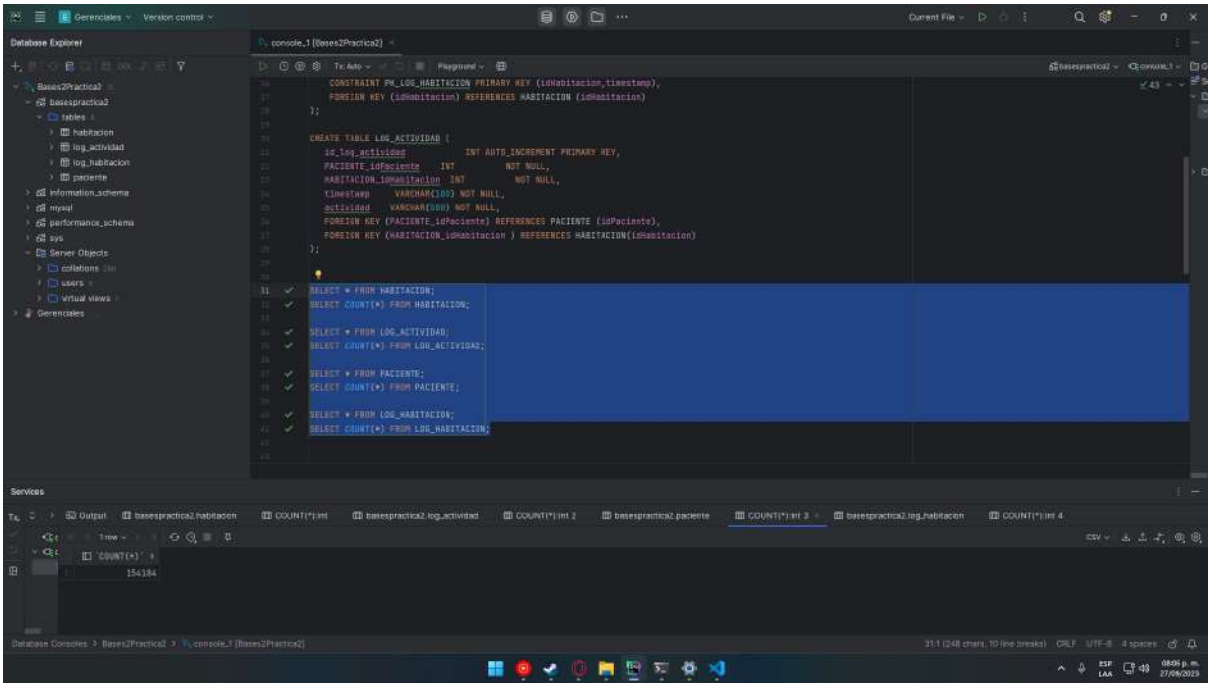
SELECT COUNT(*) FROM log_actividad



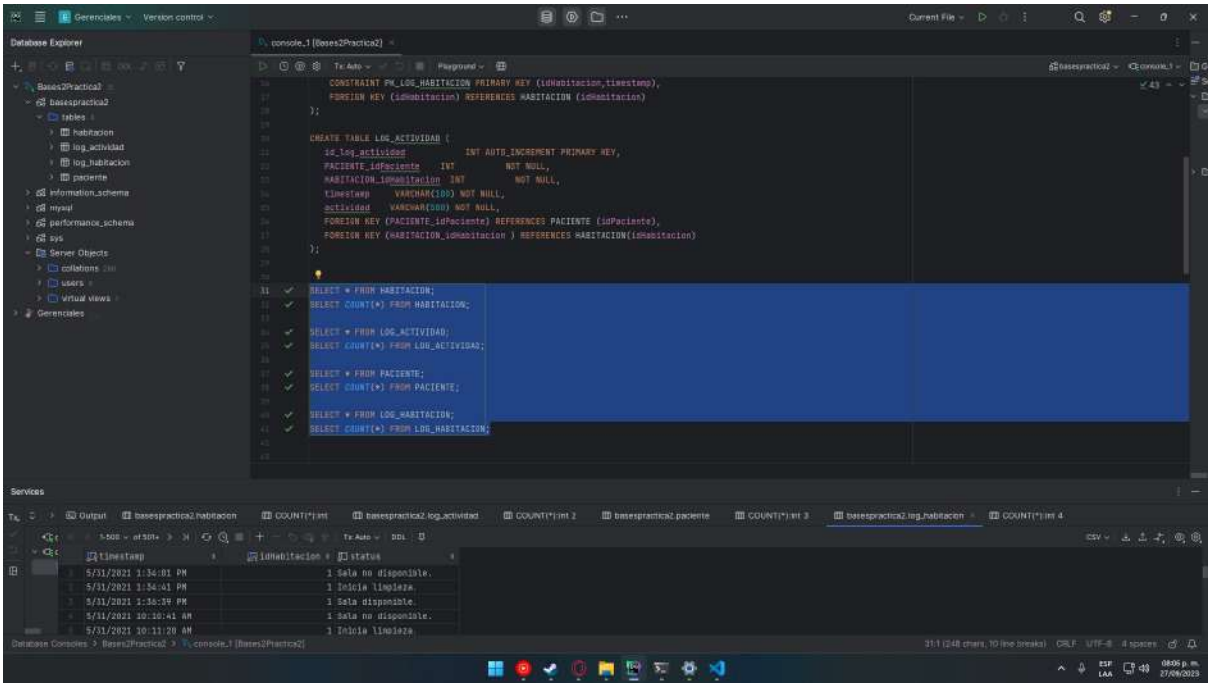
SELECT * FROM paciente



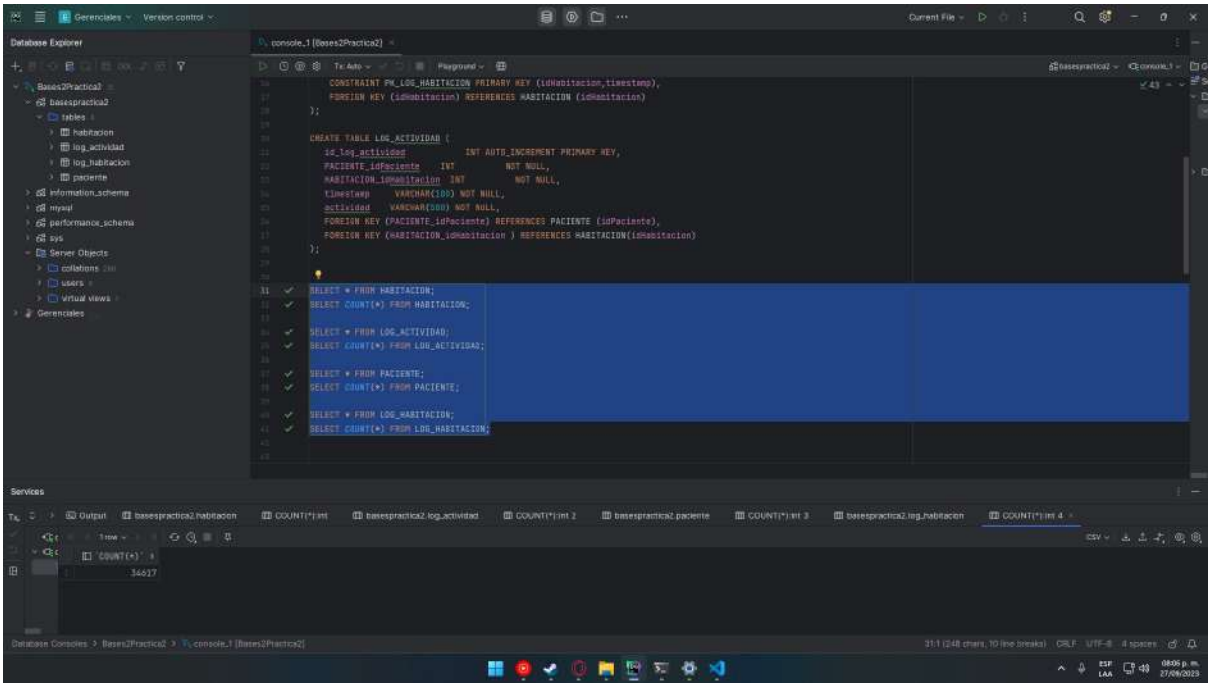
SELECT COUNT(*) FROM paciente



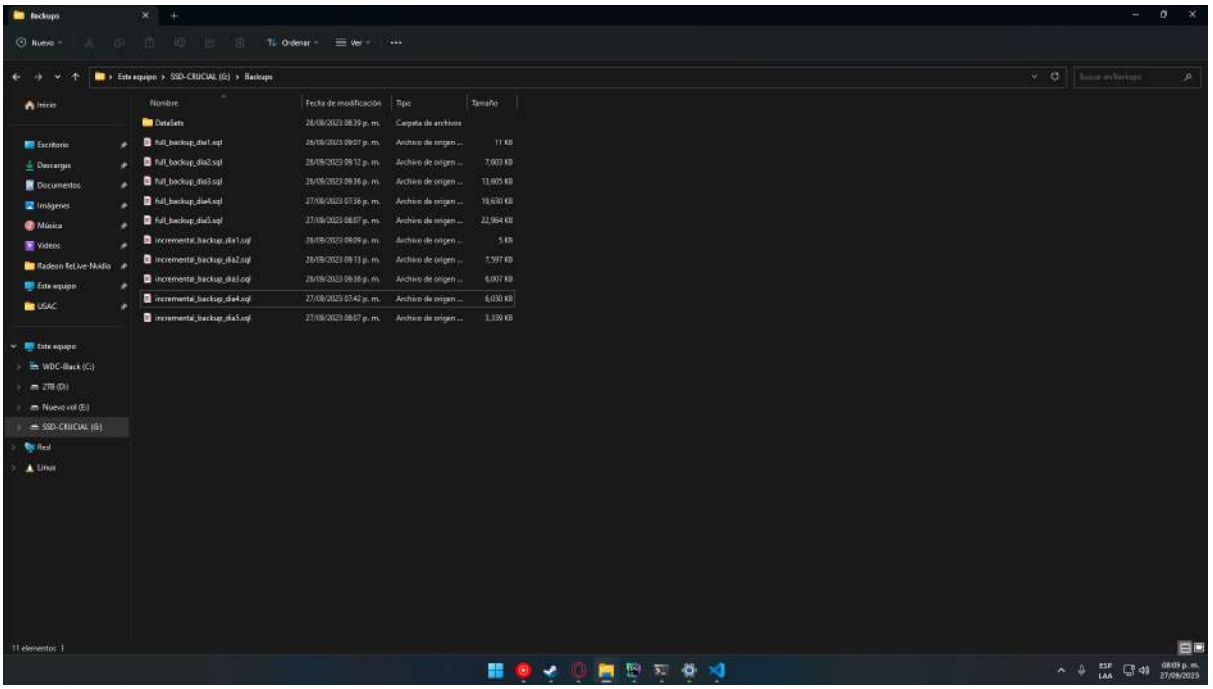
SELECT * FROM log_habitacion



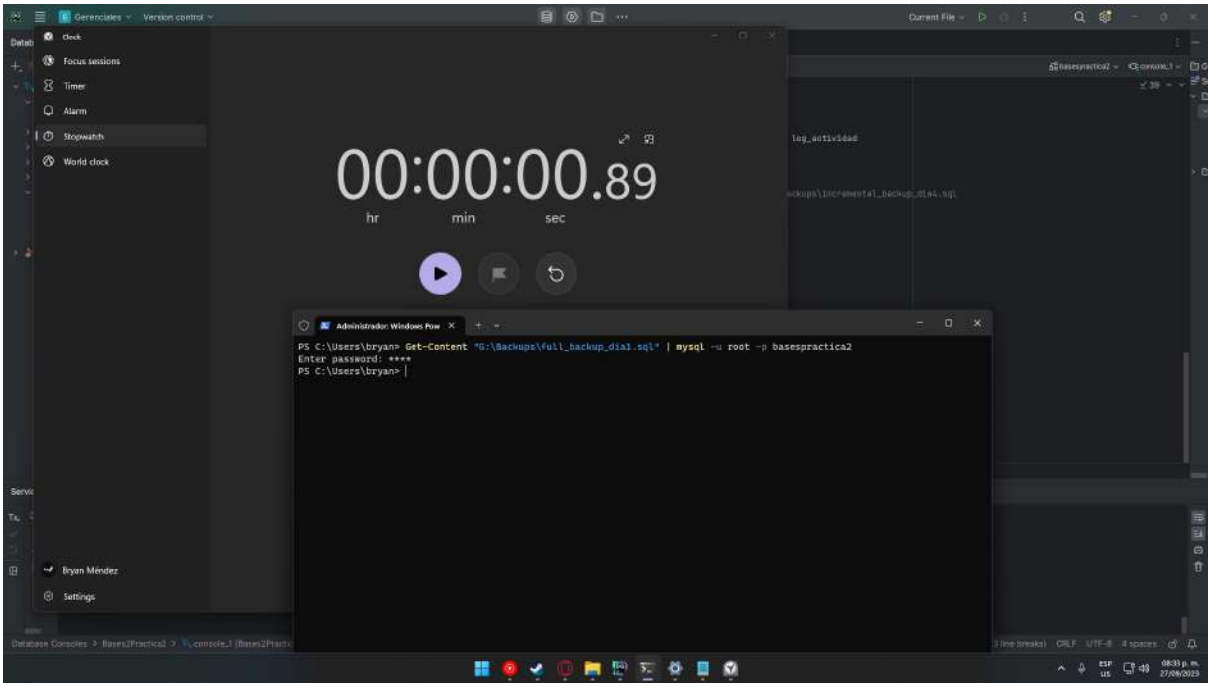
SELECT COUNT(*) FROM log_habitacion



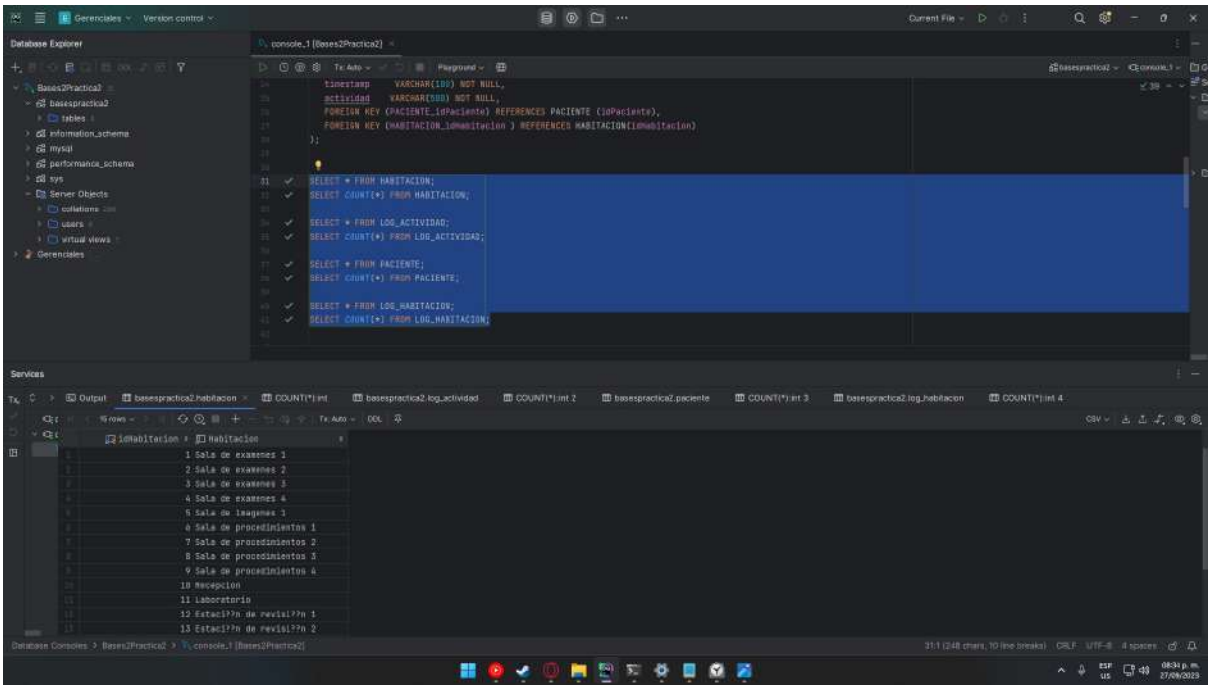
Lista de Archivos creados



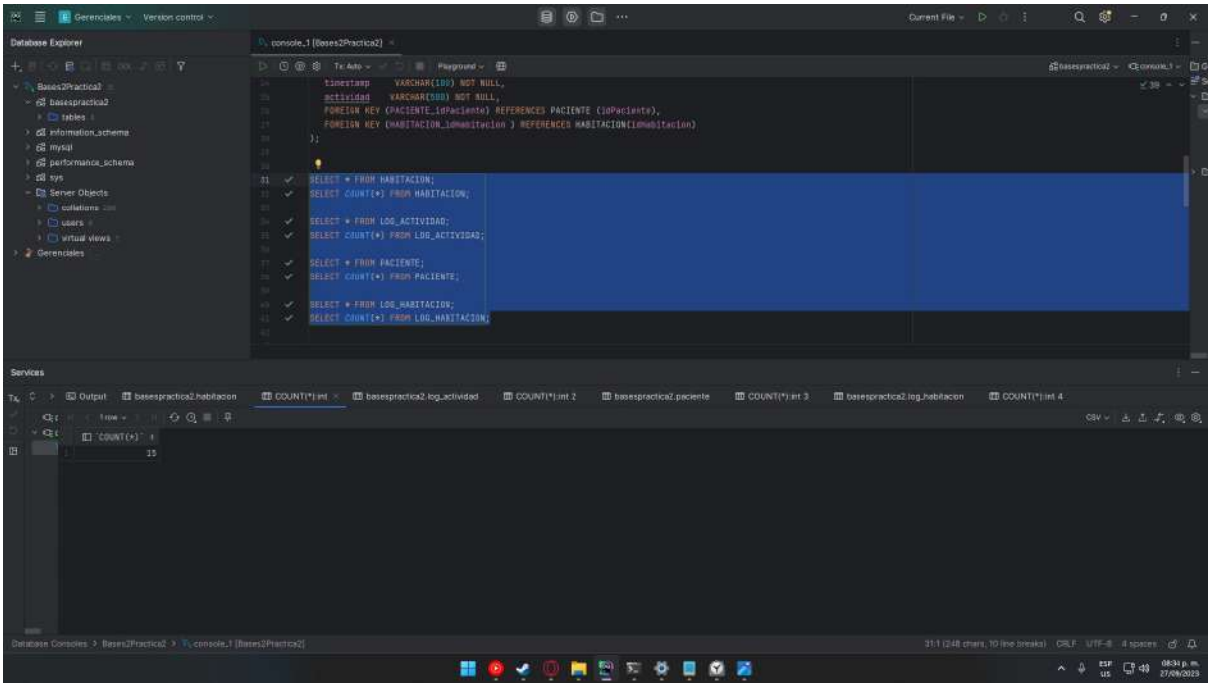
Día 6:
Eliminación de datos
Restauración de full backup 1
-- Get-Content "G:\Backups\full_backup_dia1.sql" | mysql -u root -p basespractica2



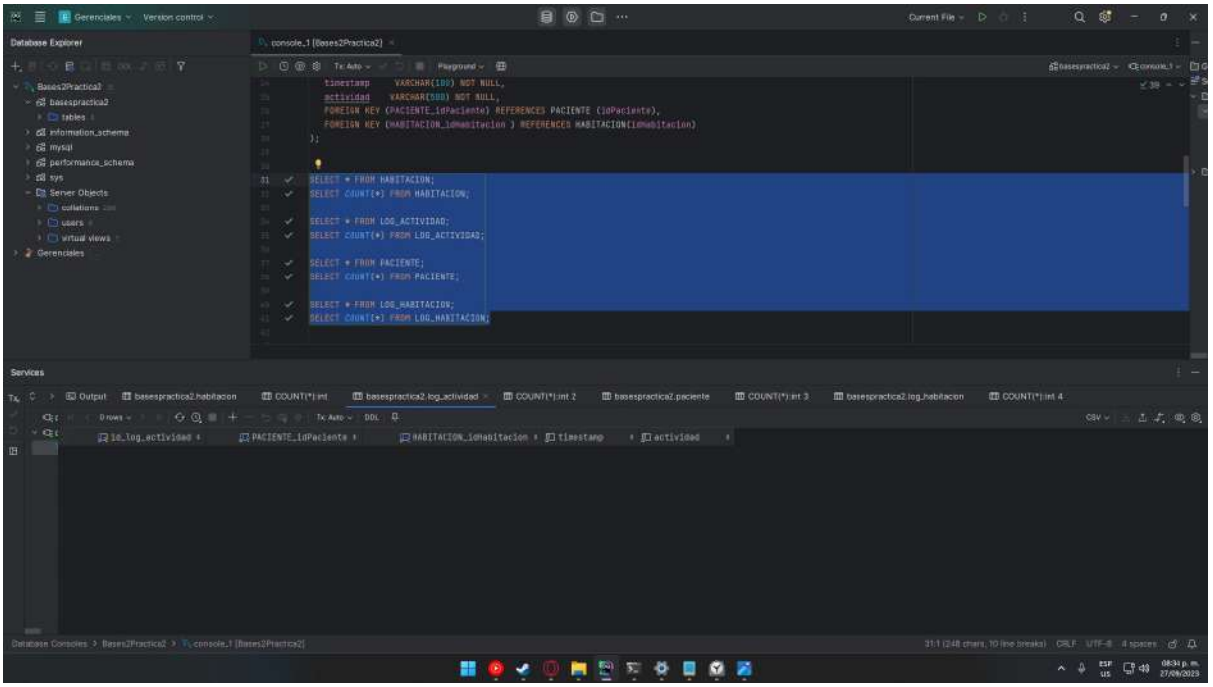
SELECT * FROM habitacion



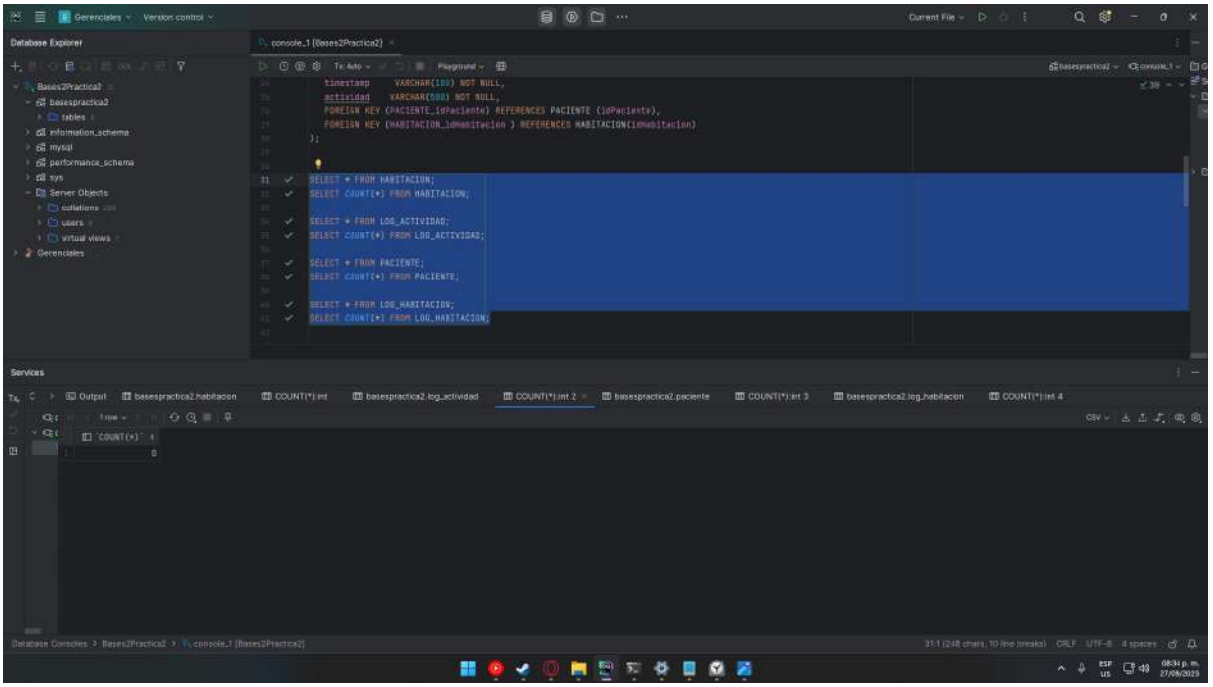
SELECT COUNT(*) FROM habitacion



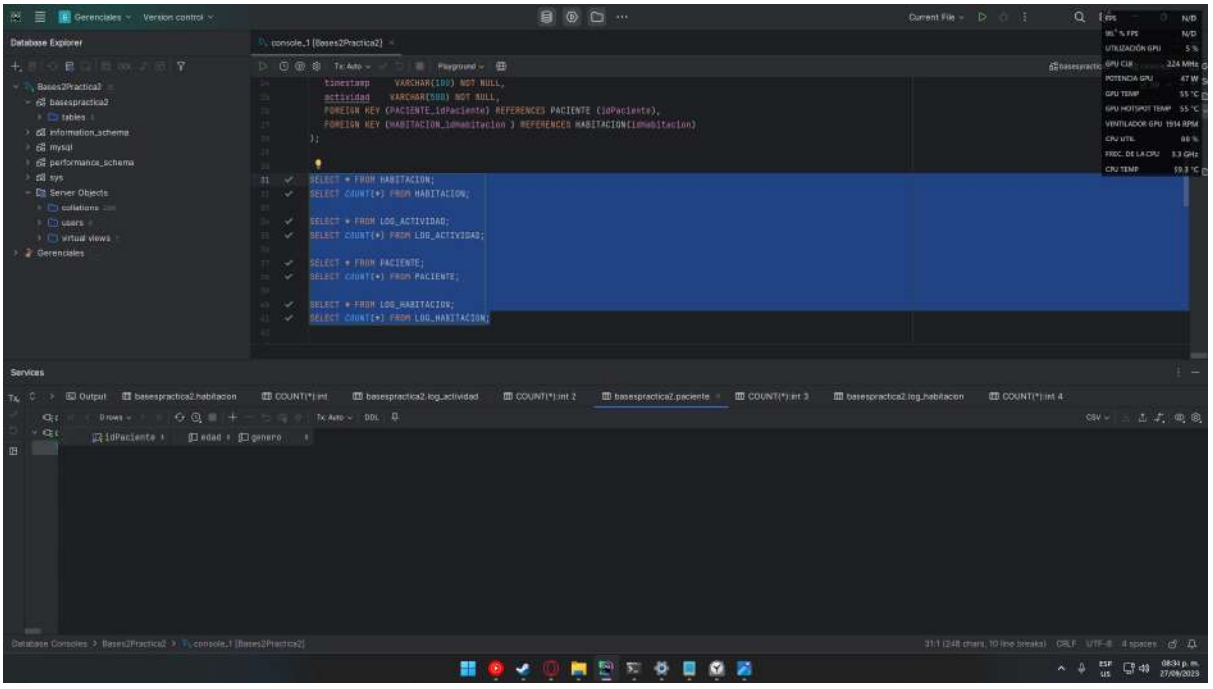
SELECT * FROM log_actividad



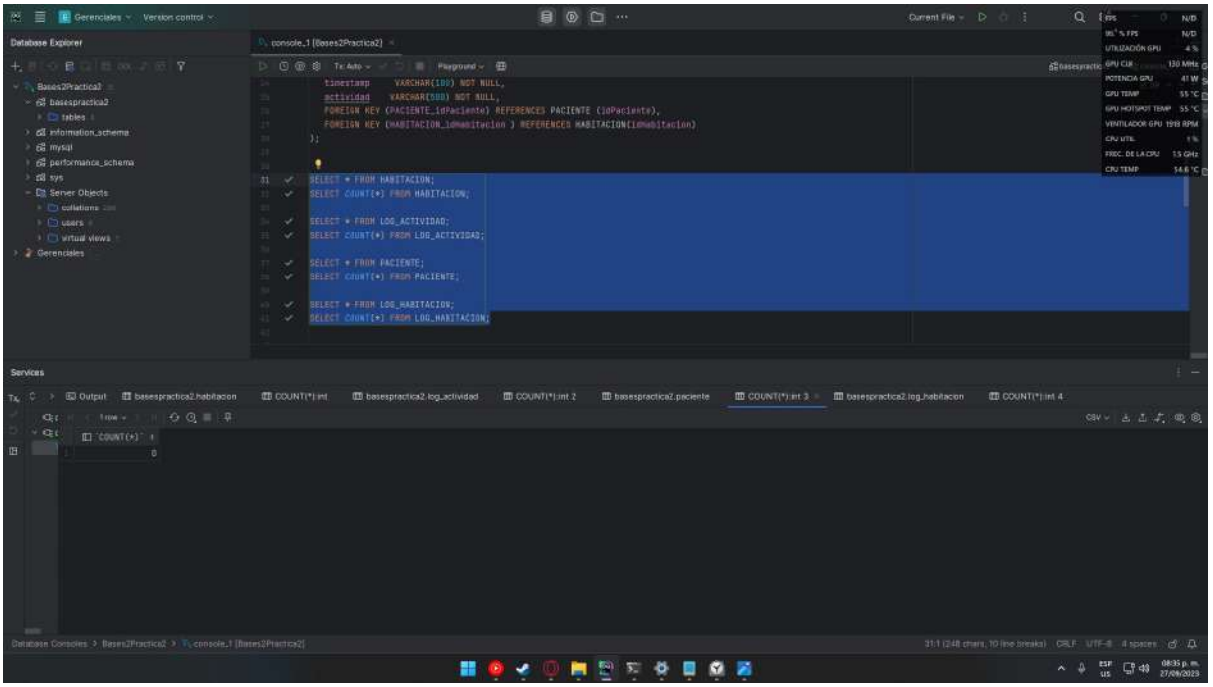
SELECT COUNT(*) FROM log_actividad



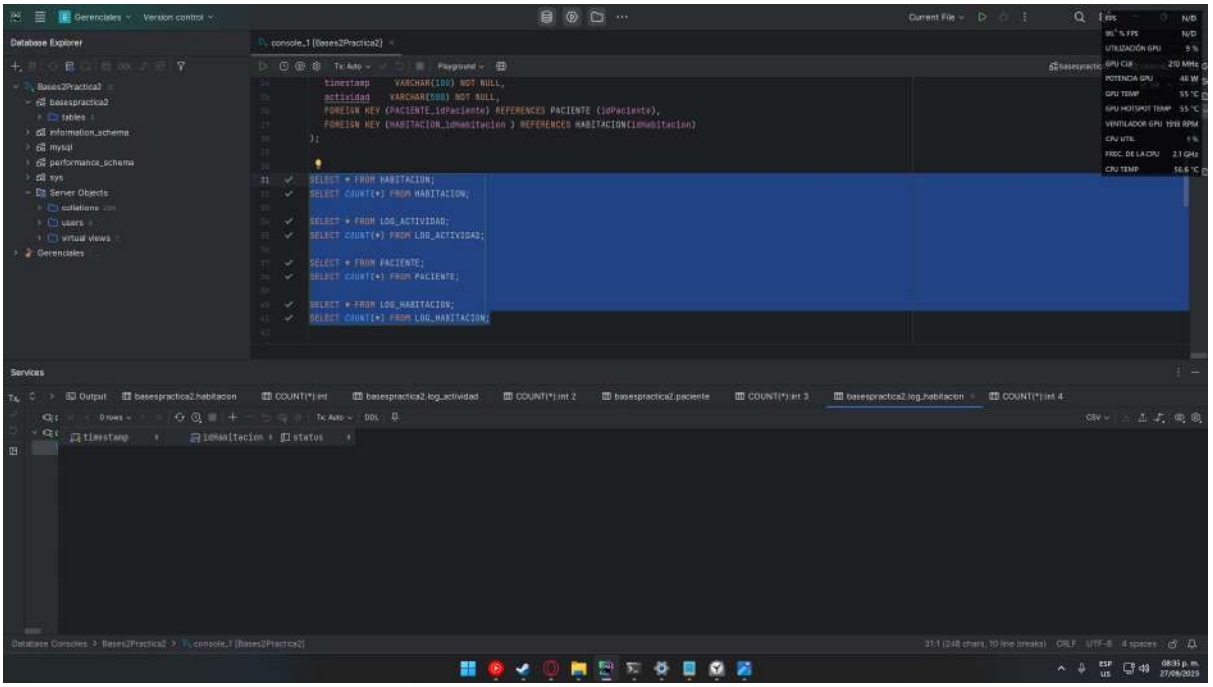
SELECT * FROM paciente



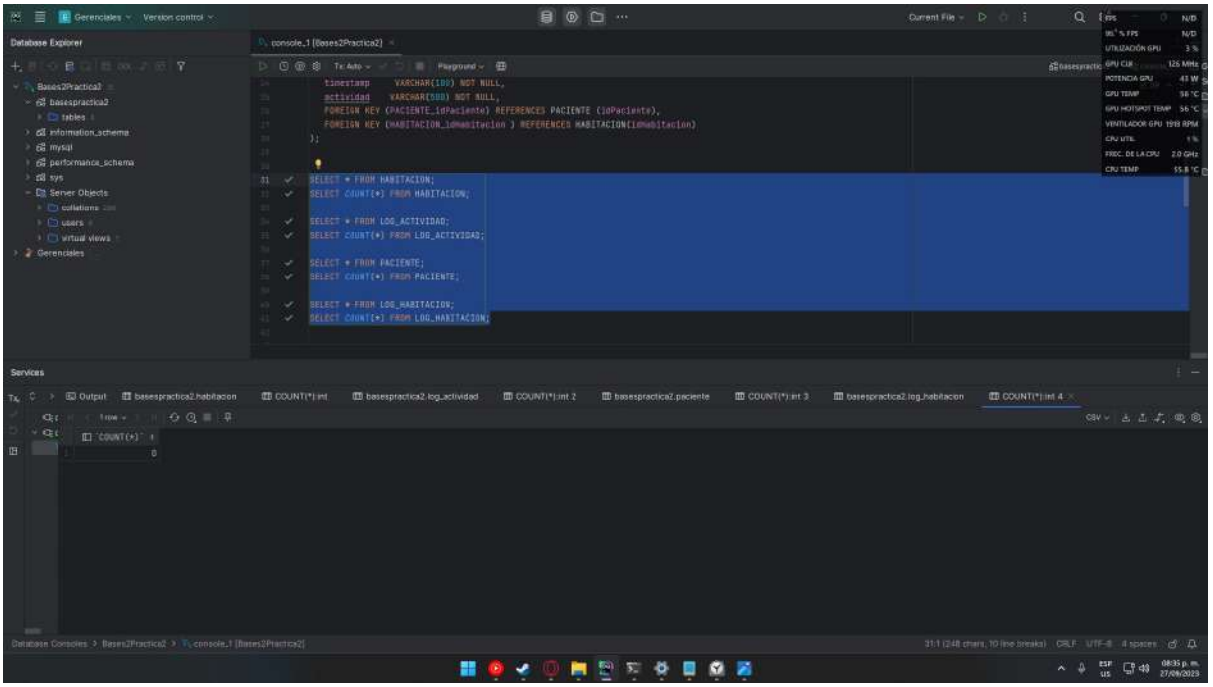
SELECT COUNT(*) FROM paciente



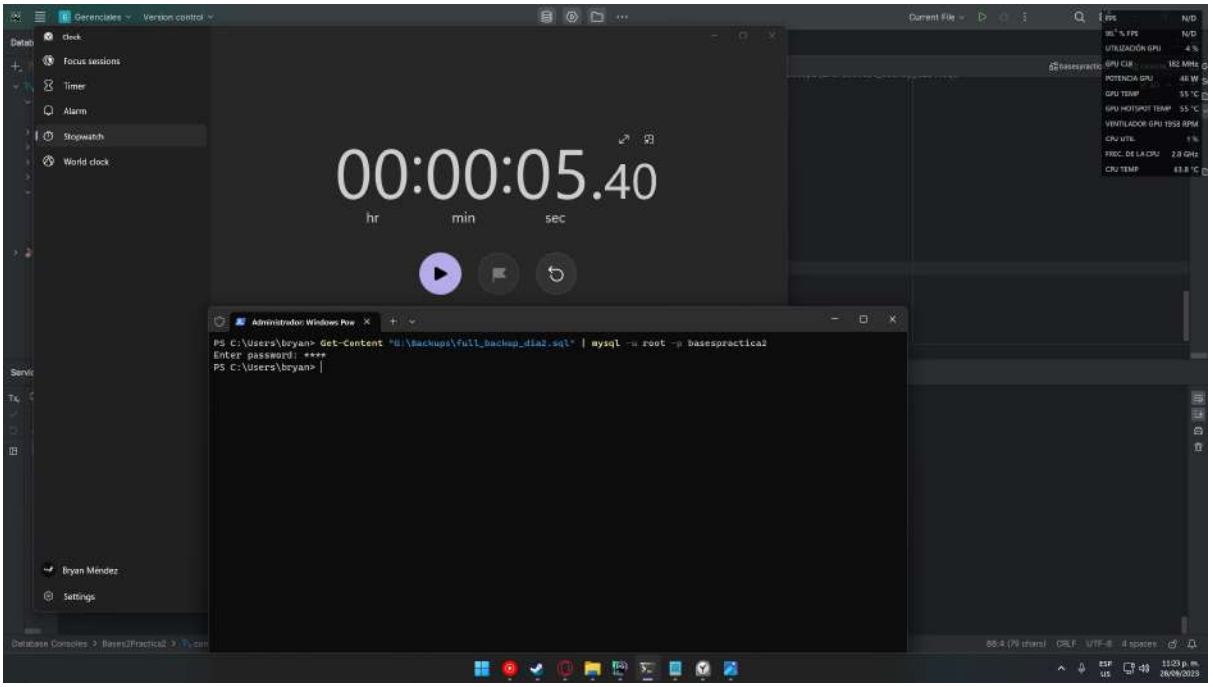
SELECT * FROM log_habitacion



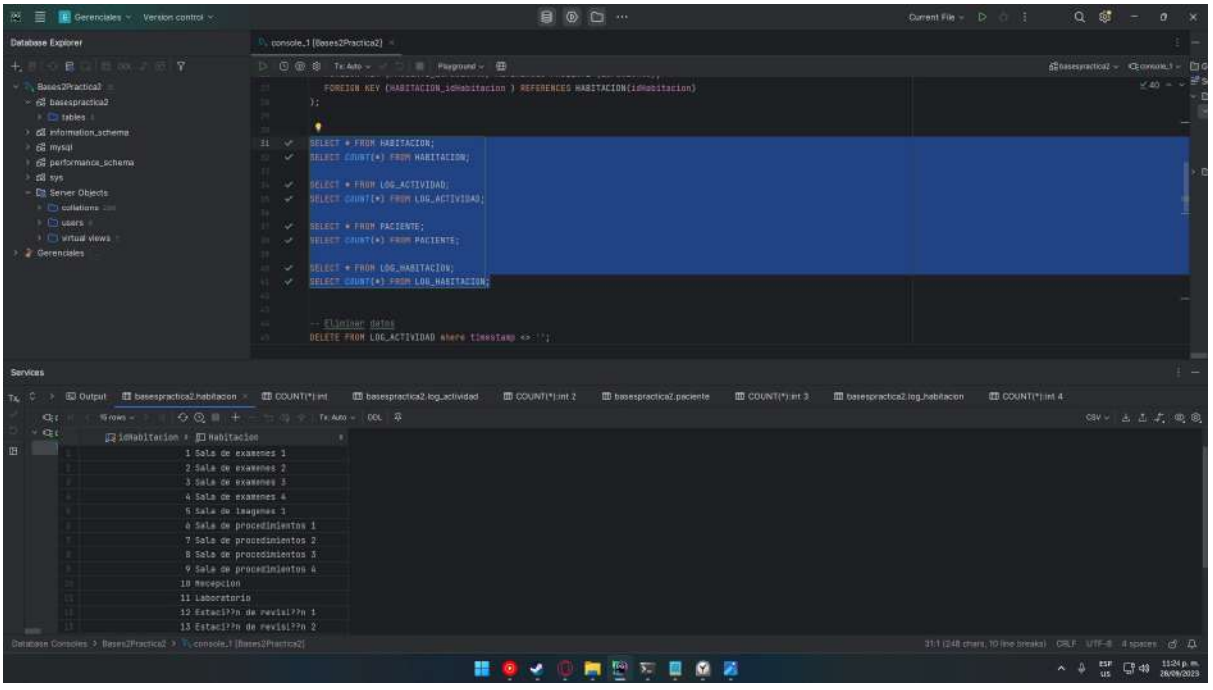
SELECT COUNT(*) FROM log_habitacion


Database Explorer
console_1 [Bases2Practica2]
timestamp VARCHAR(100) NOT NULL,
actividad VARCHAR(500) NOT NULL,
FOREIGN KEY (PACIENTE_idPaciente) REFERENCES PACIENTE (idPaciente),
FOREIGN KEY (HABITACION_idHabitacion) REFERENCES HABITACION(idHabitacion)
);
SELECT * FROM HABITACION;
SELECT COUNT(*) FROM HABITACION;
SELECT * FROM LOG_ACTIVIDAD;
SELECT COUNT(*) FROM LOG_ACTIVIDAD;
SELECT * FROM PACIENTE;
SELECT COUNT(*) FROM PACIENTE;
SELECT * FROM LOG_HABITACION;
SELECT COUNT(*) FROM LOG_HABITACION;
Services
COUNT(*)
0

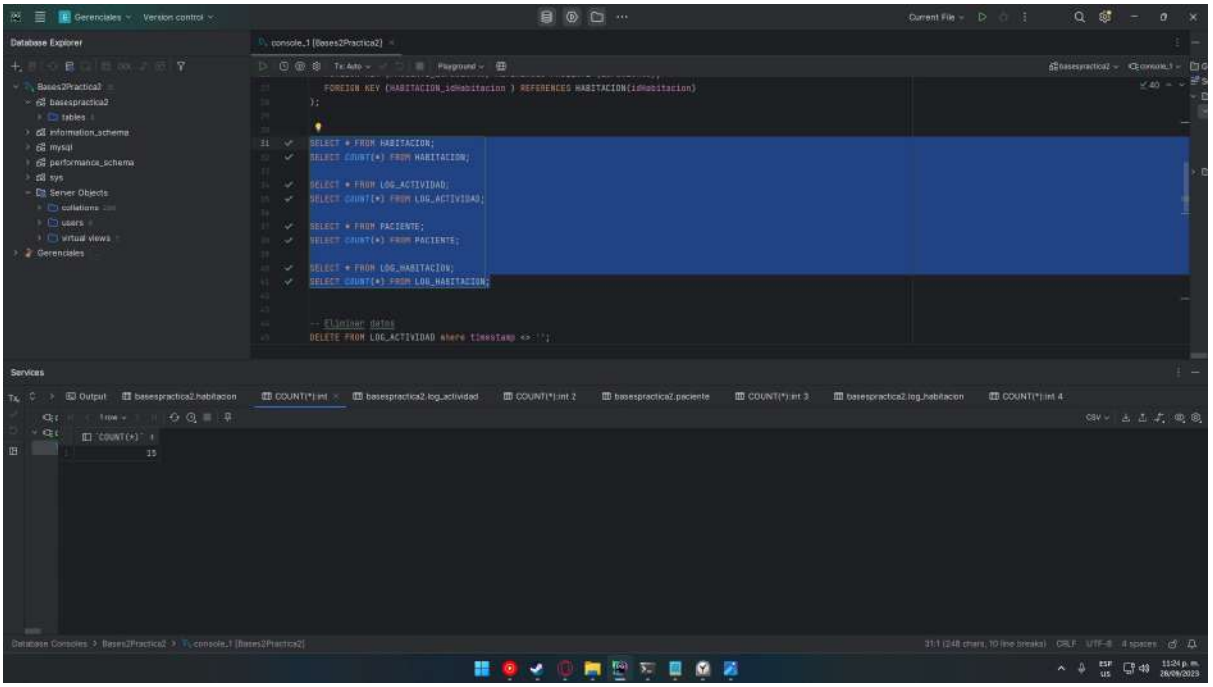
Día 7:
Eliminación de datos
Restauración de full backup 2
-- Get-Content "G:\Backups\full_backup_dia2.sql" | mysql -u root -p basespractica2



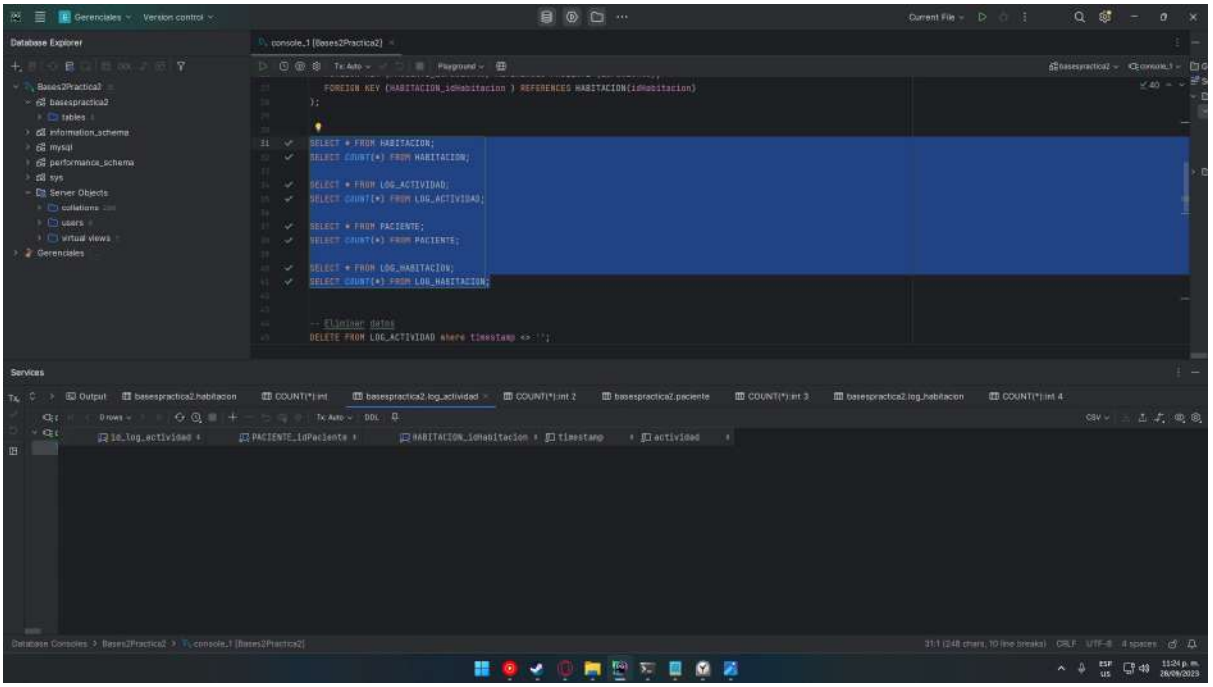
SELECT * FROM habitacion



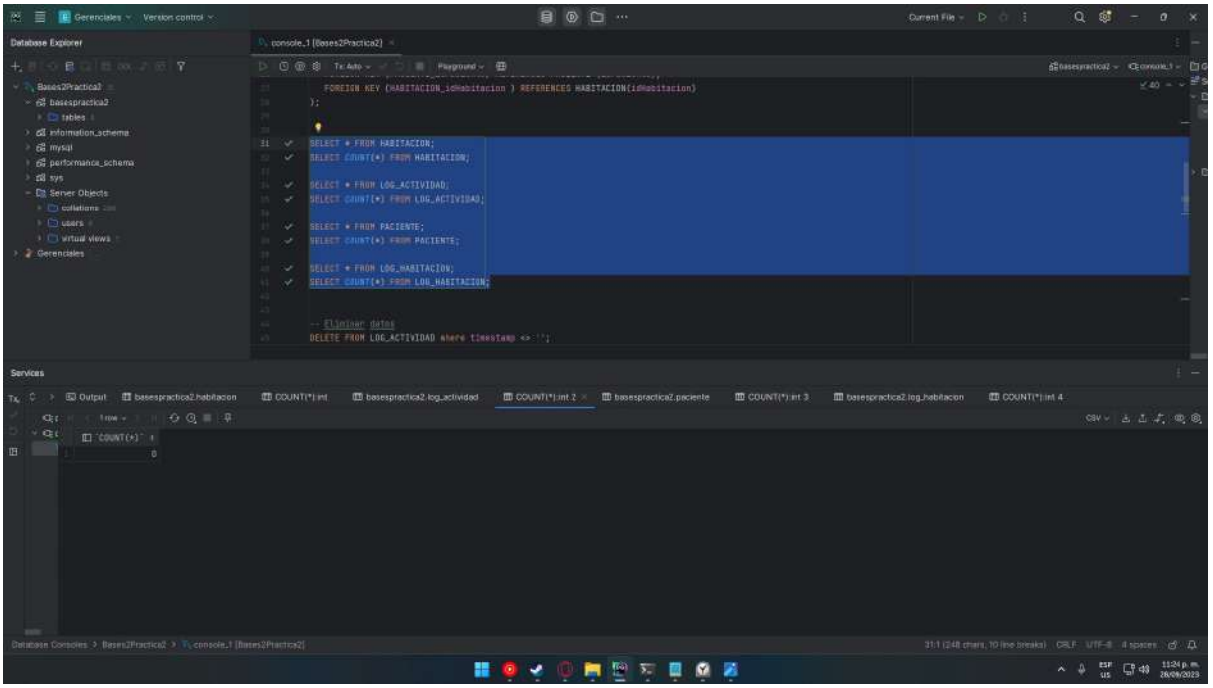
SELECT COUNT(*) FROM habitacion



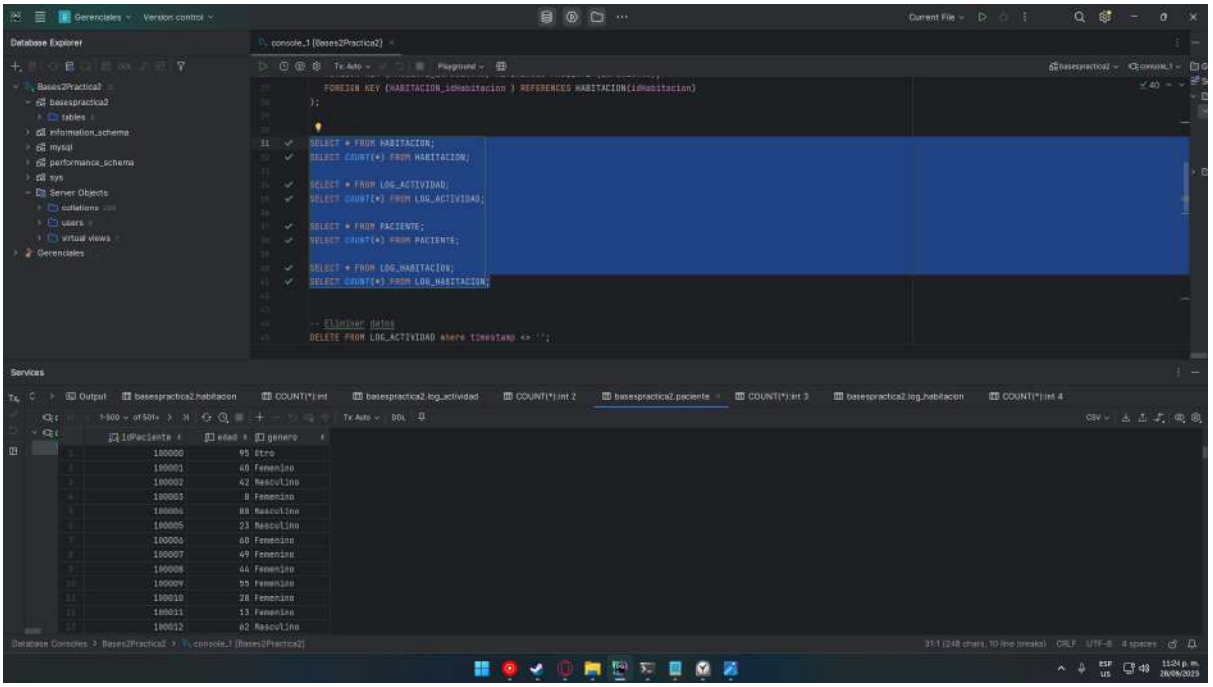
SELECT * FROM log_actividad



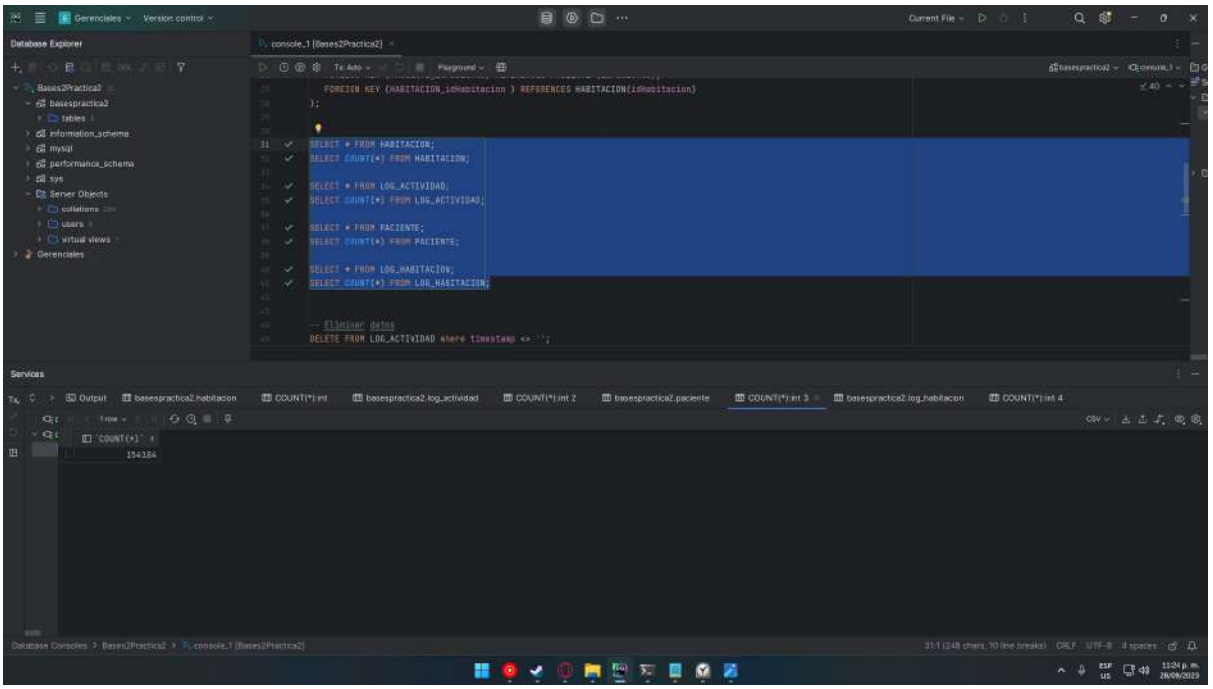
SELECT COUNT(*) FROM log_actividad



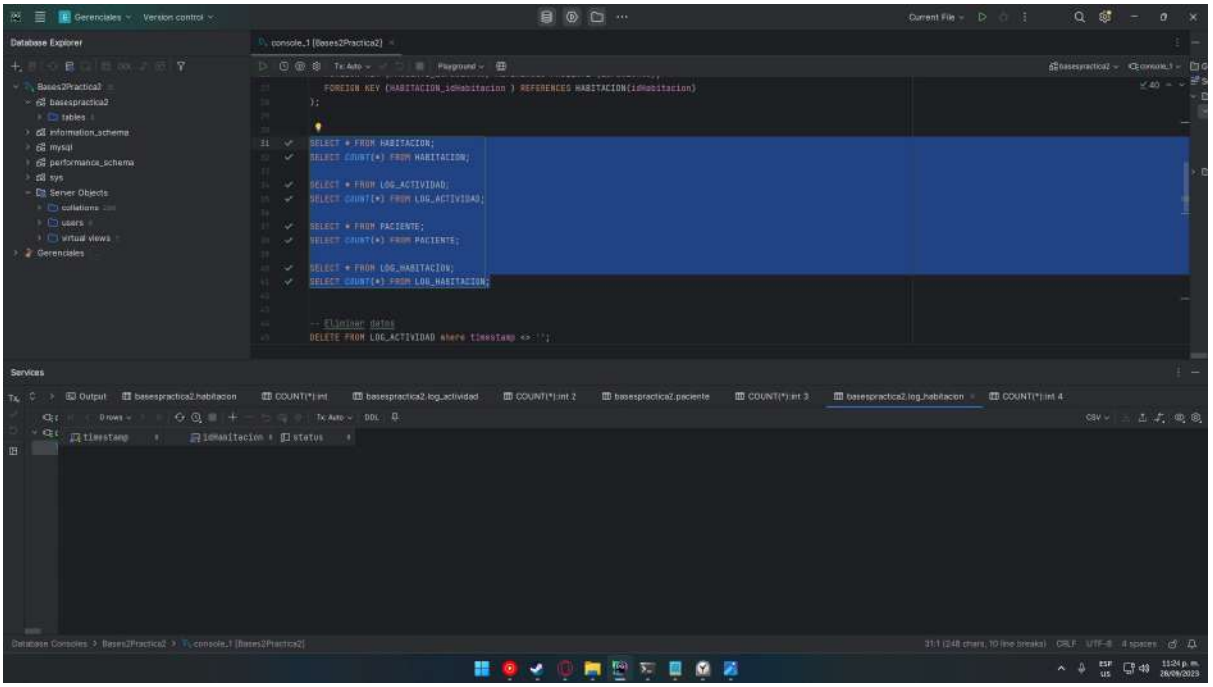
SELECT * FROM paciente



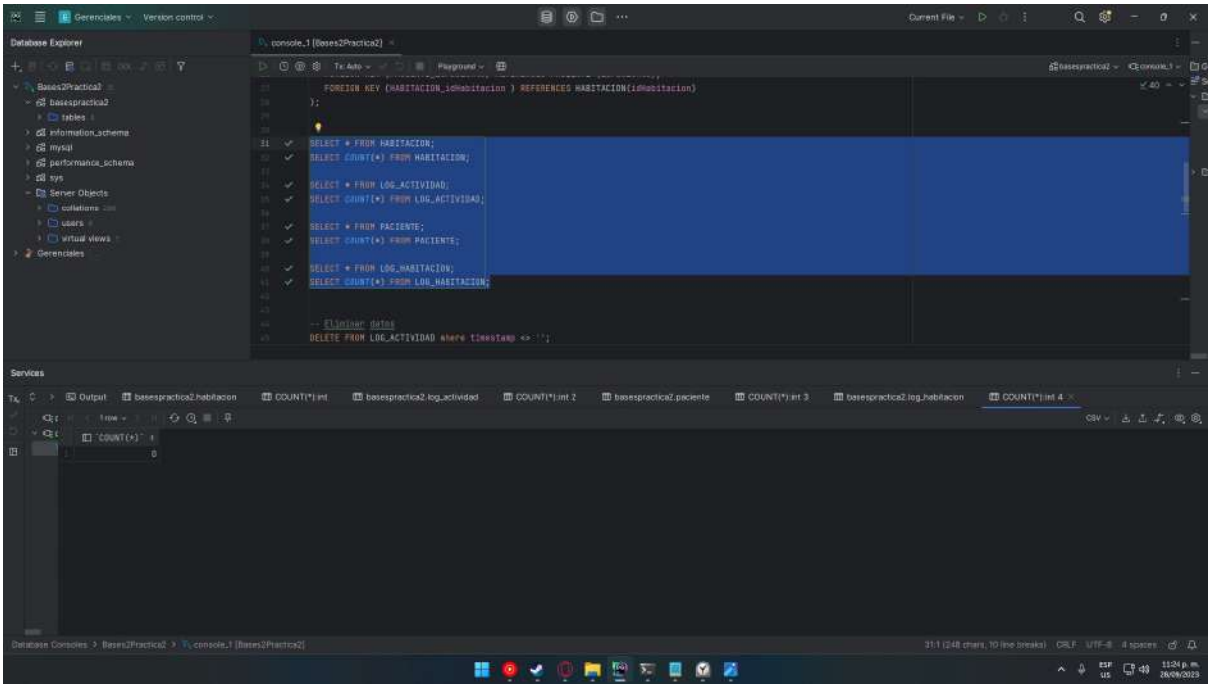
SELECT COUNT(*) FROM paciente



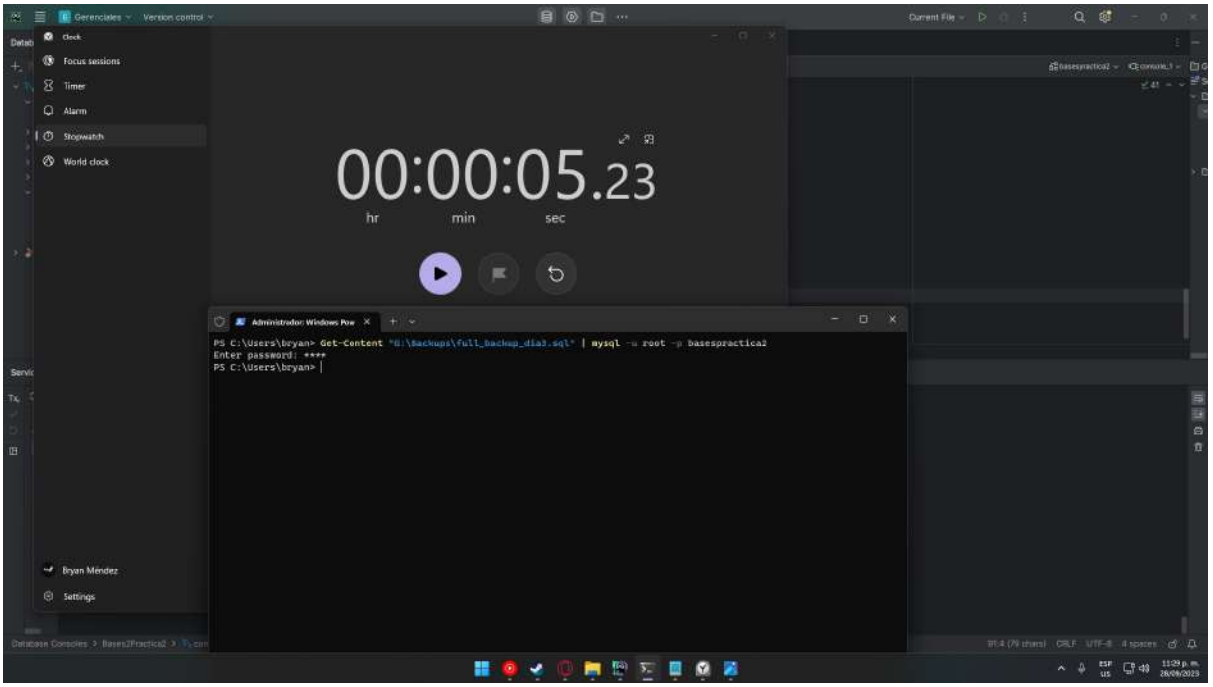
SELECT * FROM log_habitacion



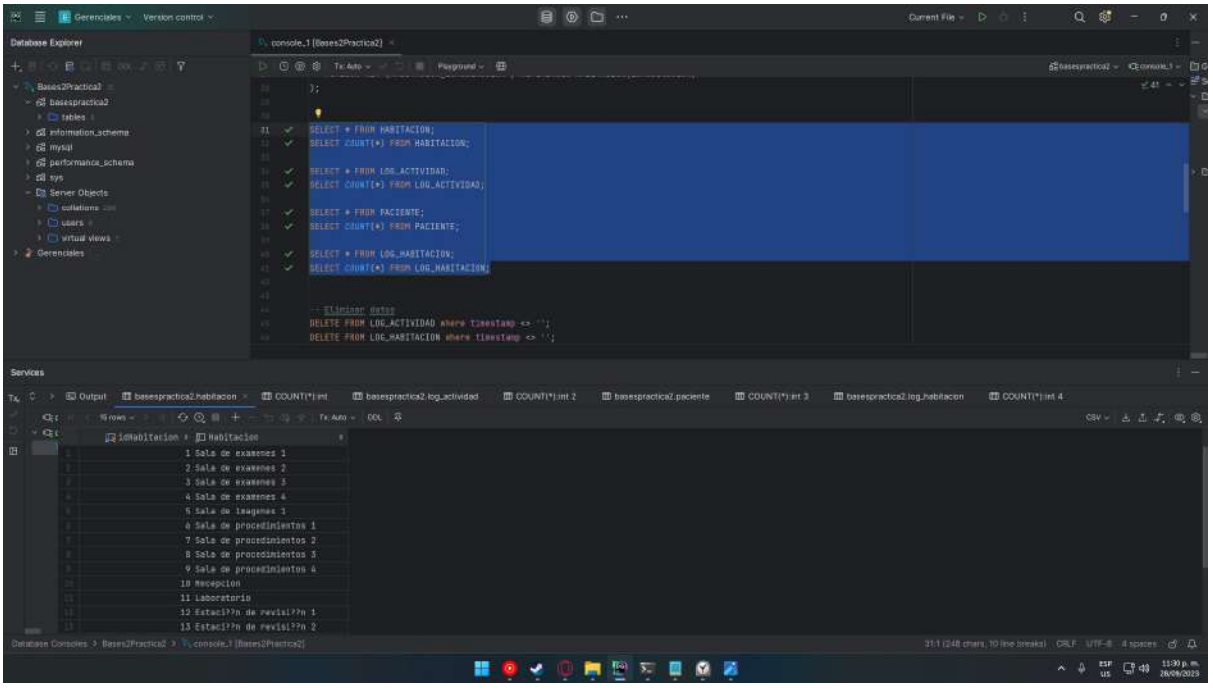
SELECT COUNT(*) FROM log_habitacion



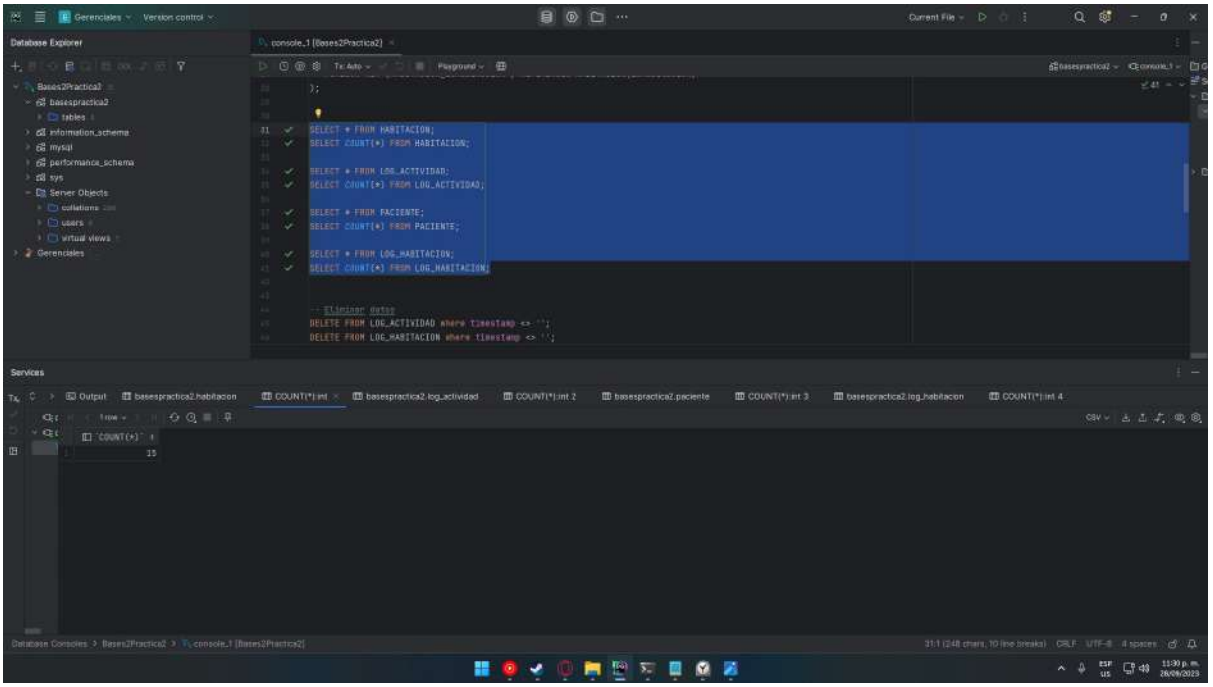
Día 8:
Eliminación de datos
Restauración de full backup 3
-- Get-Content "G:\Backups\full_backup_dia3.sql" | mysql -u root -p basespractica2



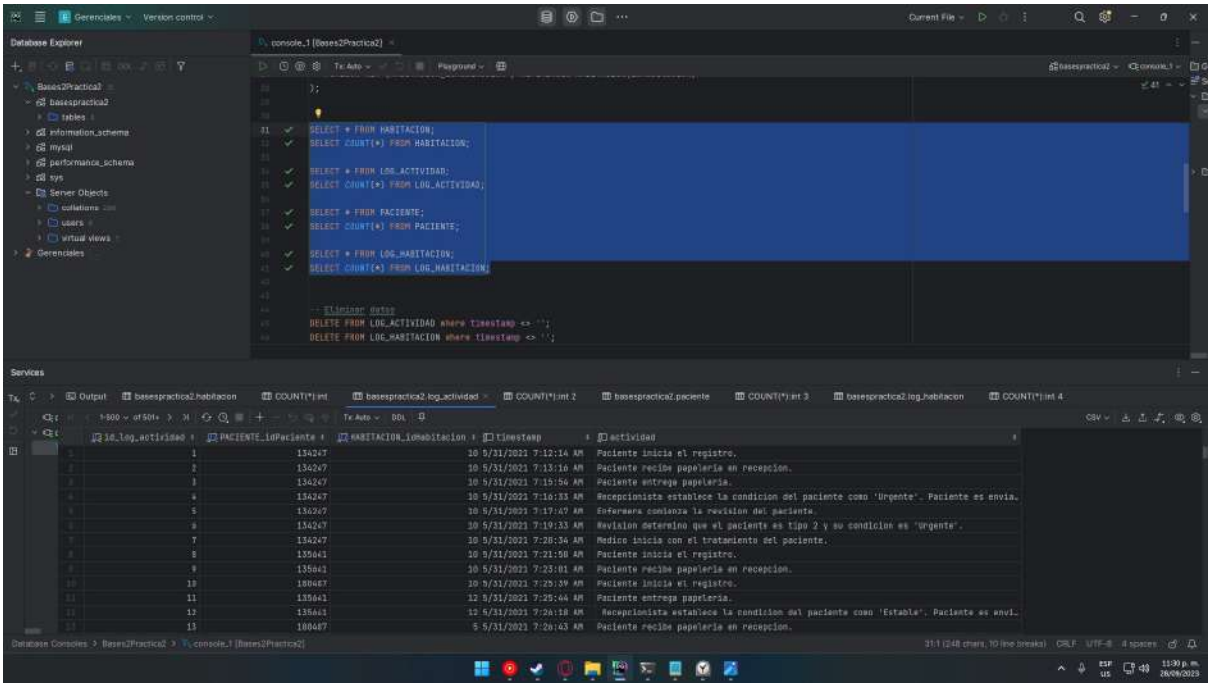
SELECT * FROM habitacion



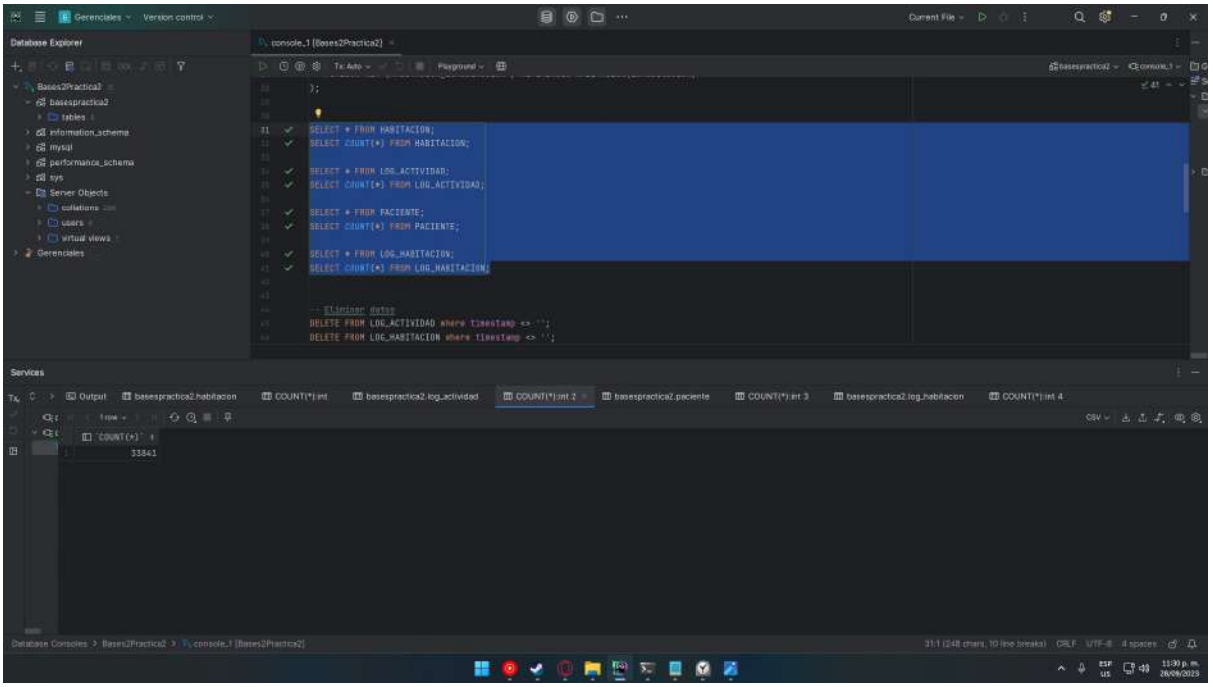
SELECT COUNT(*) FROM habitacion



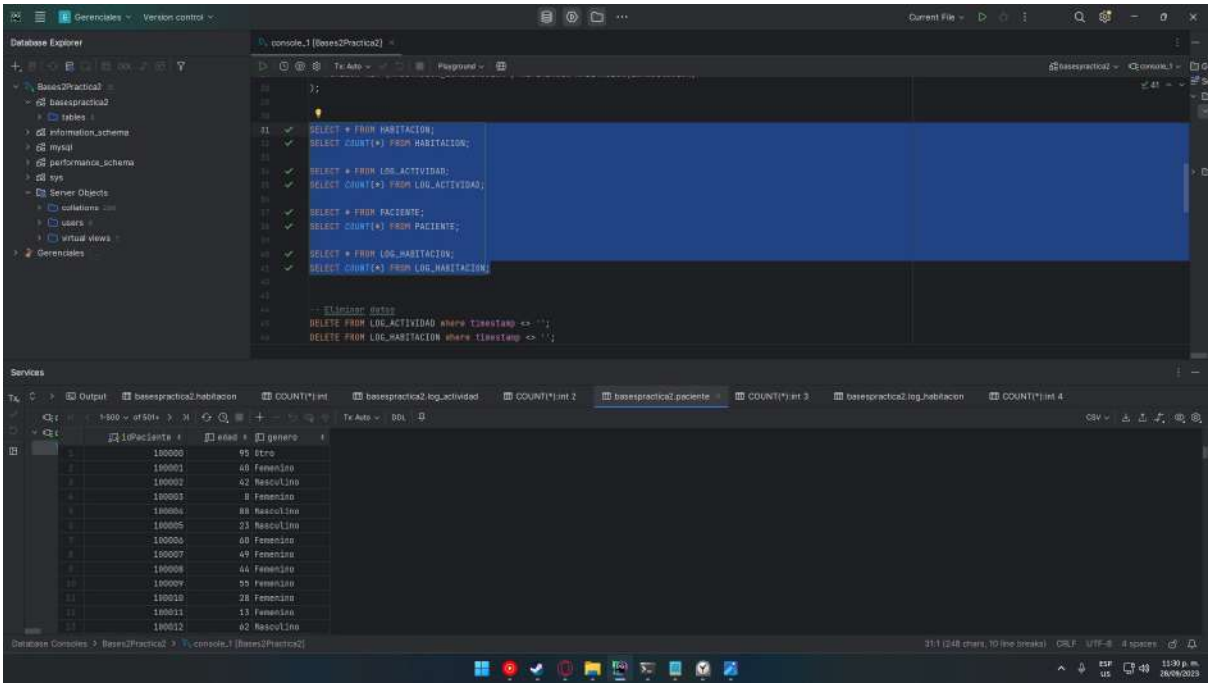
SELECT * FROM log_actividad



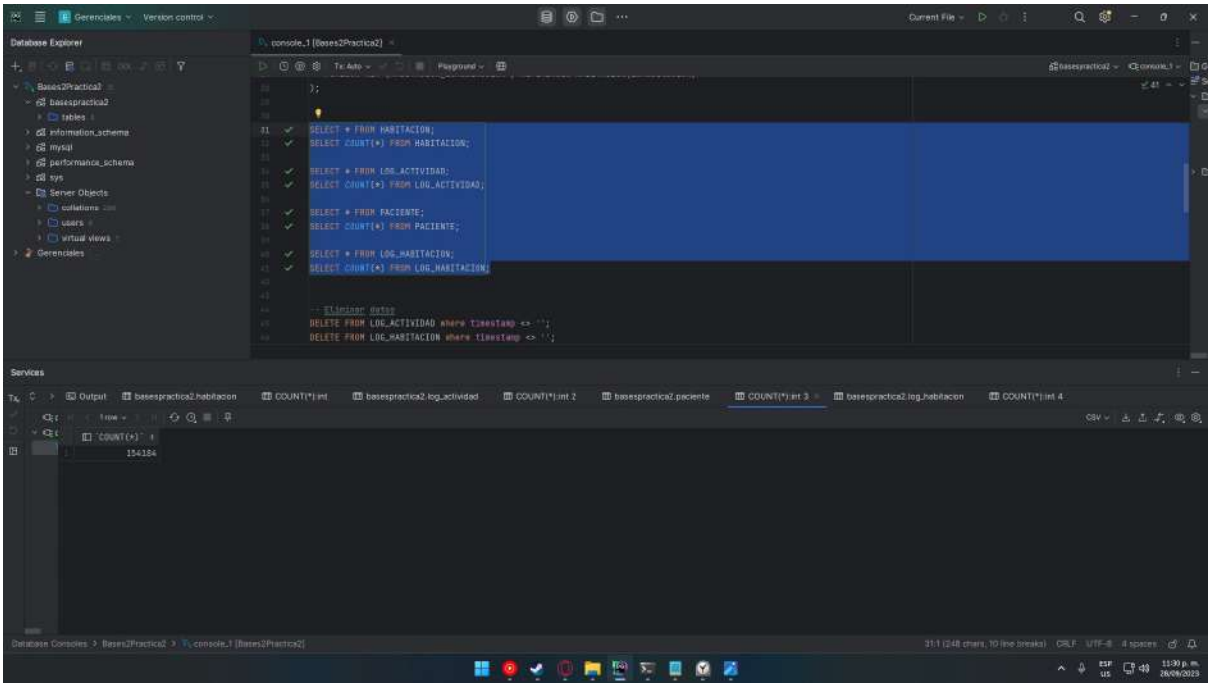
SELECT COUNT(*) FROM log_actividad



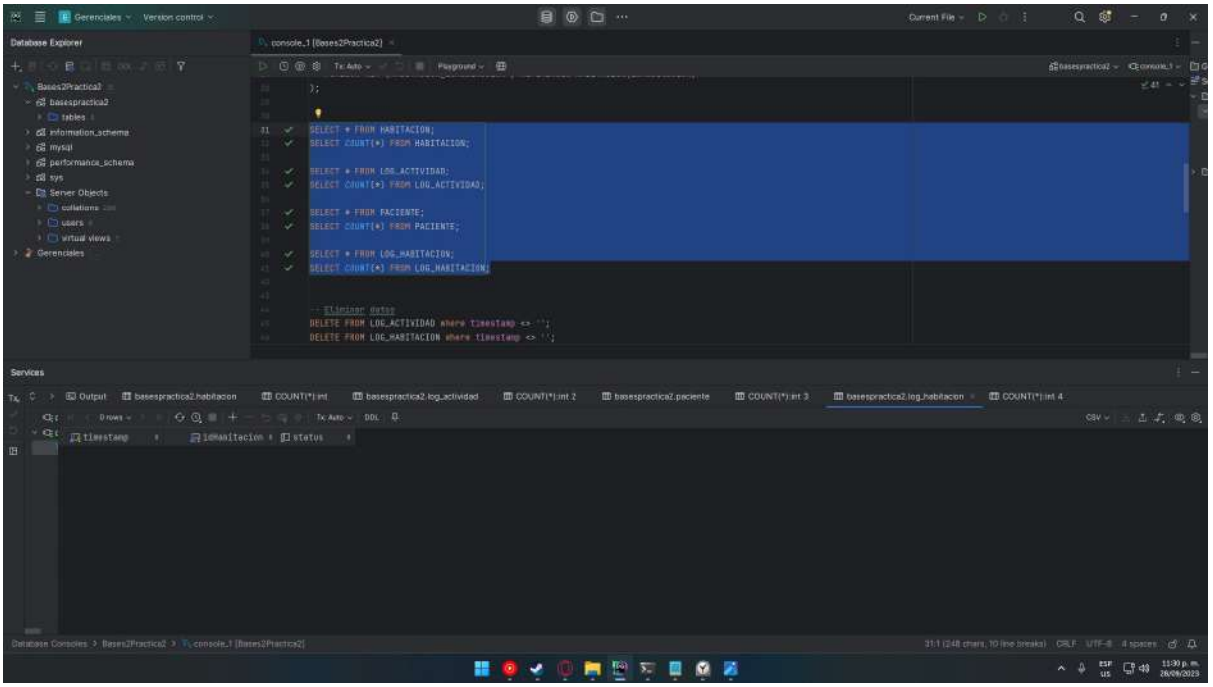
SELECT * FROM paciente



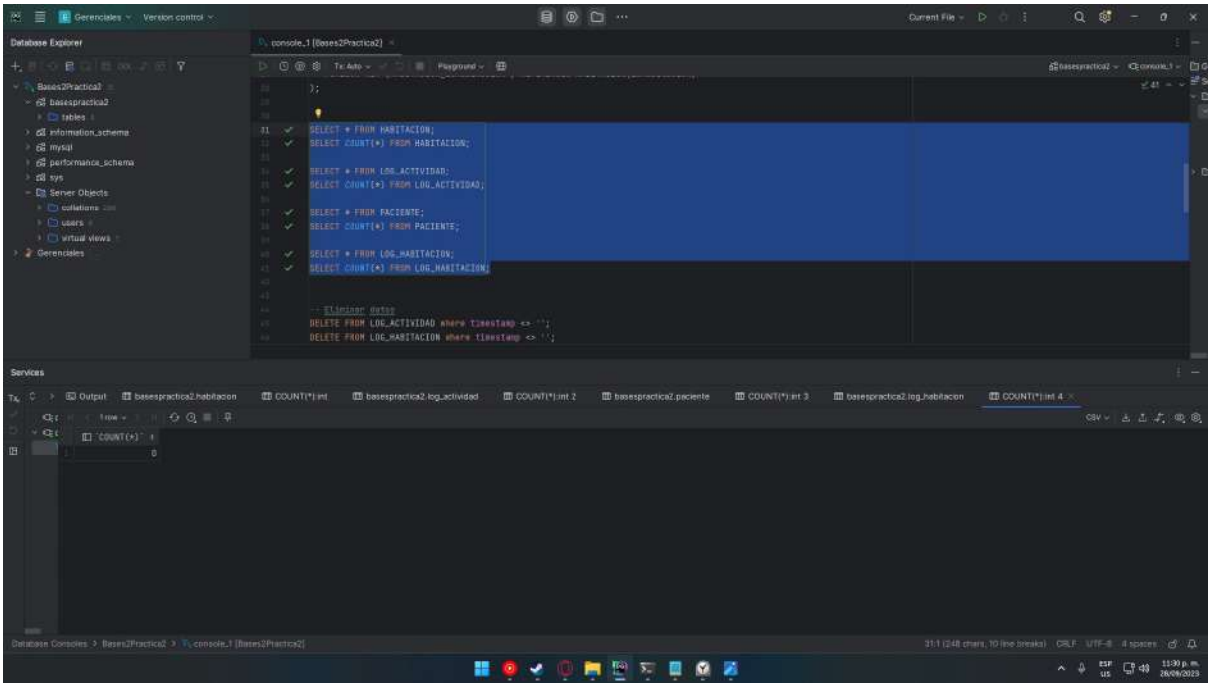
SELECT COUNT(*) FROM paciente



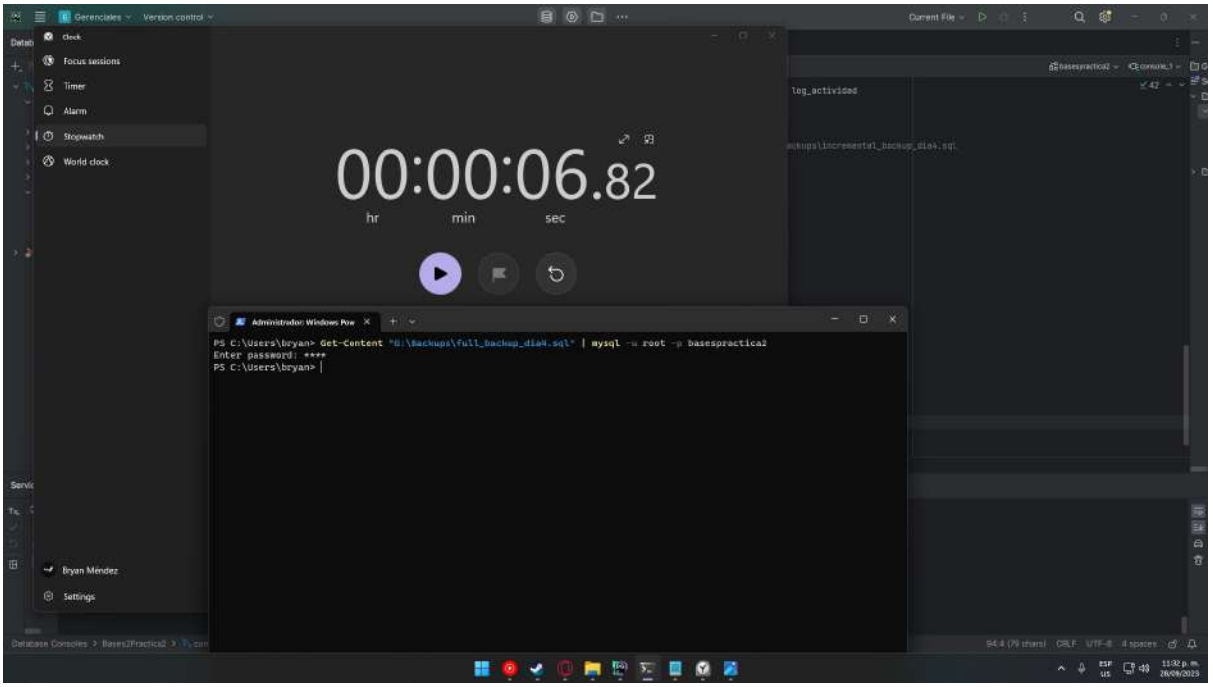
SELECT * FROM log_habitacion



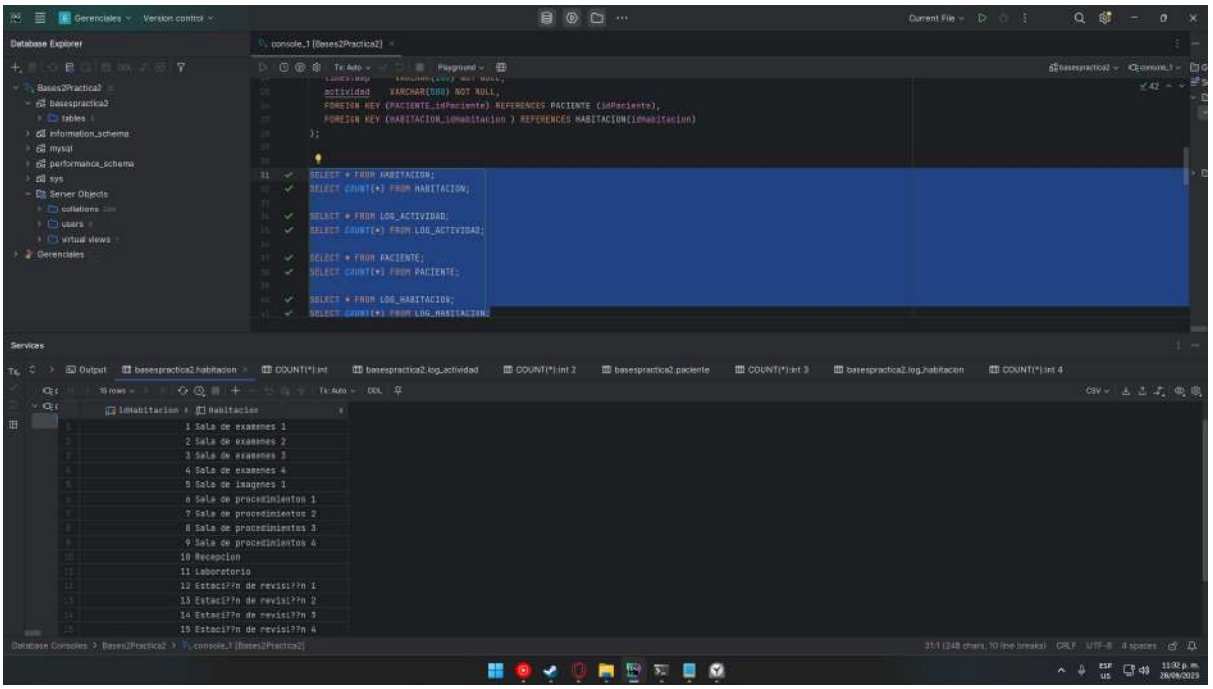
SELECT COUNT(*) FROM log_habitacion


Database Explorer
console_1 [Bases2Practica2]
Bases2Practica2
basespractica2
tables
information_schema
mysql
performance_schema
sys
Server Objects
collations
users
virtual views
Gerenciales
SELECT * FROM HABITACION;
SELECT COUNT(*) FROM HABITACION;
SELECT * FROM LOG_ACTIVIDAD;
SELECT COUNT(*) FROM LOG_ACTIVIDAD;
SELECT * FROM PACIENTE;
SELECT COUNT(*) FROM PACIENTE;
SELECT * FROM LOG_HABITACION;
SELECT COUNT(*) FROM LOG_HABITACION;
-- Eliminar datos
DELETE FROM LOG_ACTIVIDAD where timestamp <> '';
DELETE FROM LOG_HABITACION where timestamp <> '';
Services
Output
basespractica2.habitacion
COUNT(*) int
basespractica2.log_actividad
COUNT(*) int 2
basespractica2.paciente
COUNT(*) int 3
basespractica2.log_habitacion
COUNT(*) int 4
COUNT(*)
0

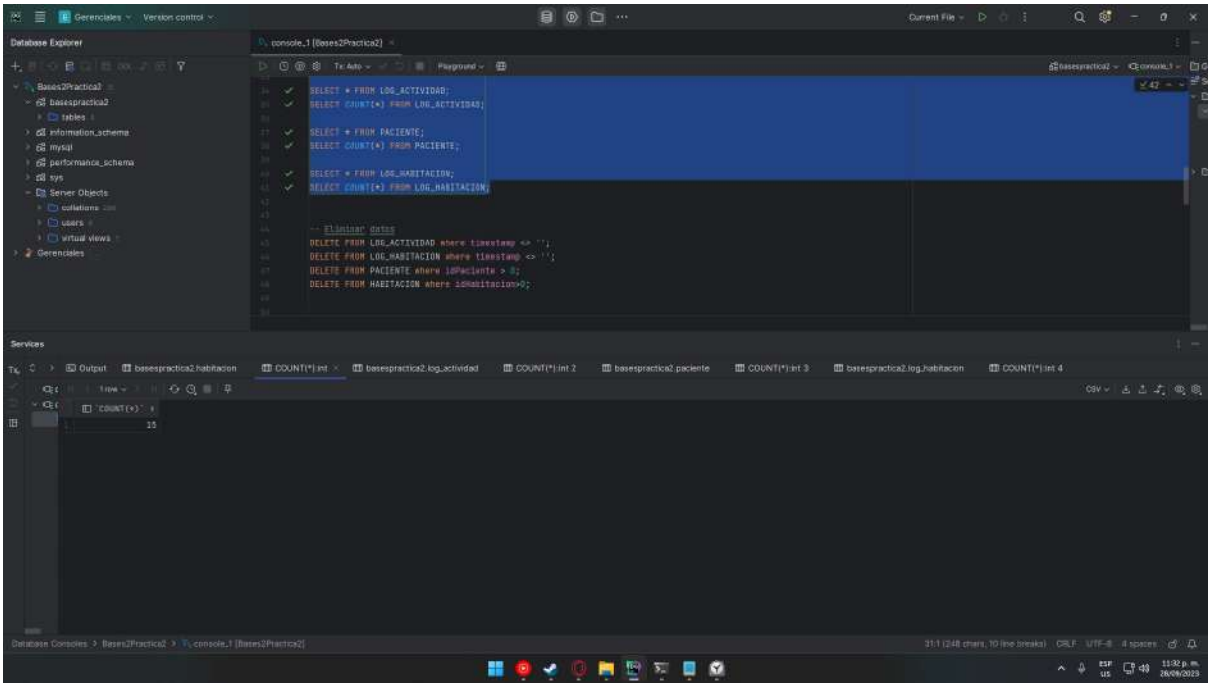
Día 9:
Eliminación de datos
Restauración de full backup 4
-- Get-Content "G:\Backups\full_backup_dia4.sql" | mysql -u root -p basespractica2



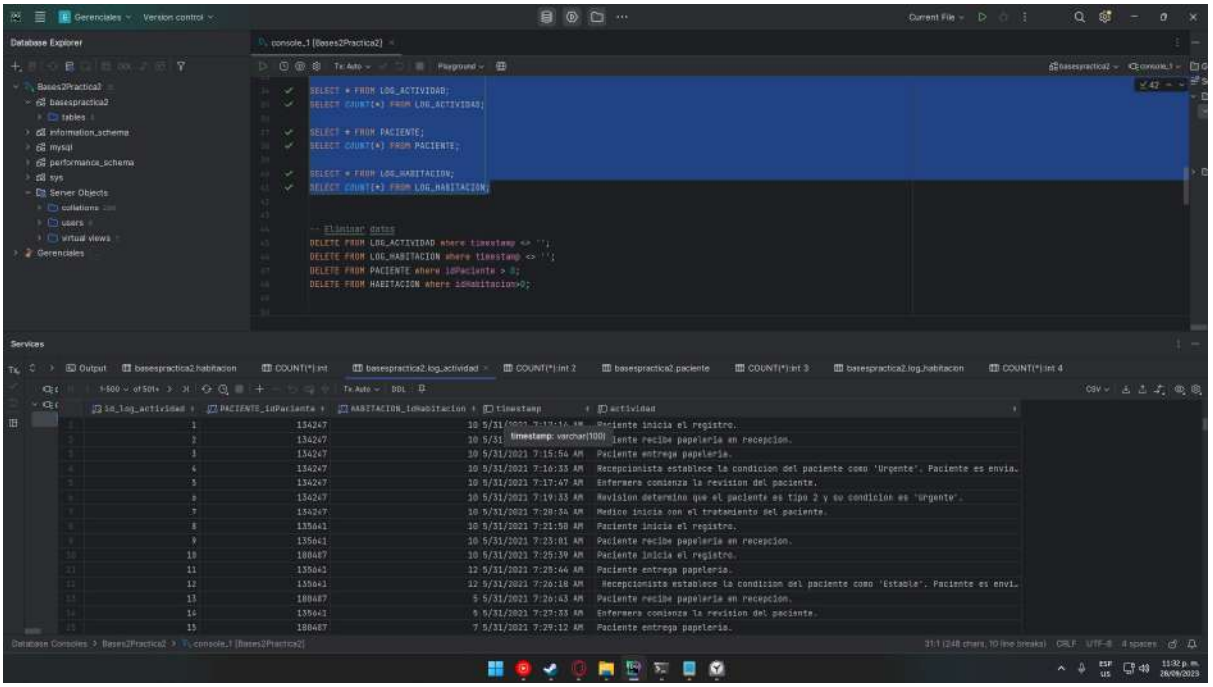
SELECT * FROM habitacion



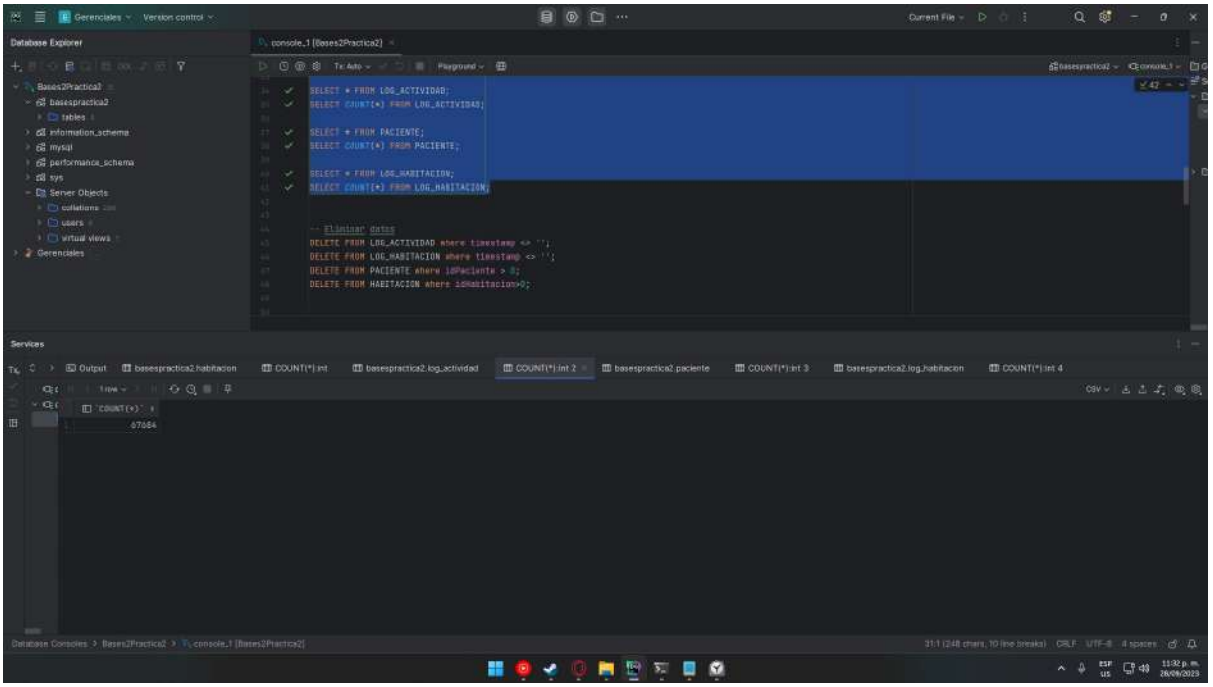
SELECT COUNT(*) FROM habitacion



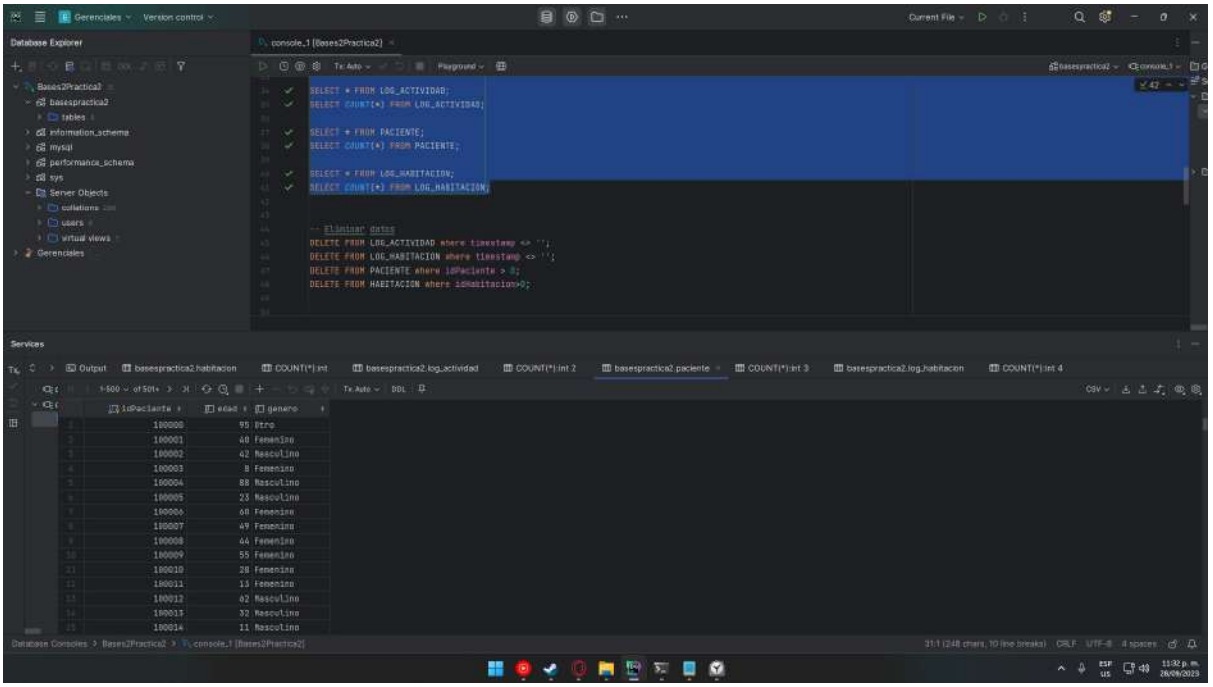
SELECT * FROM log_actividad



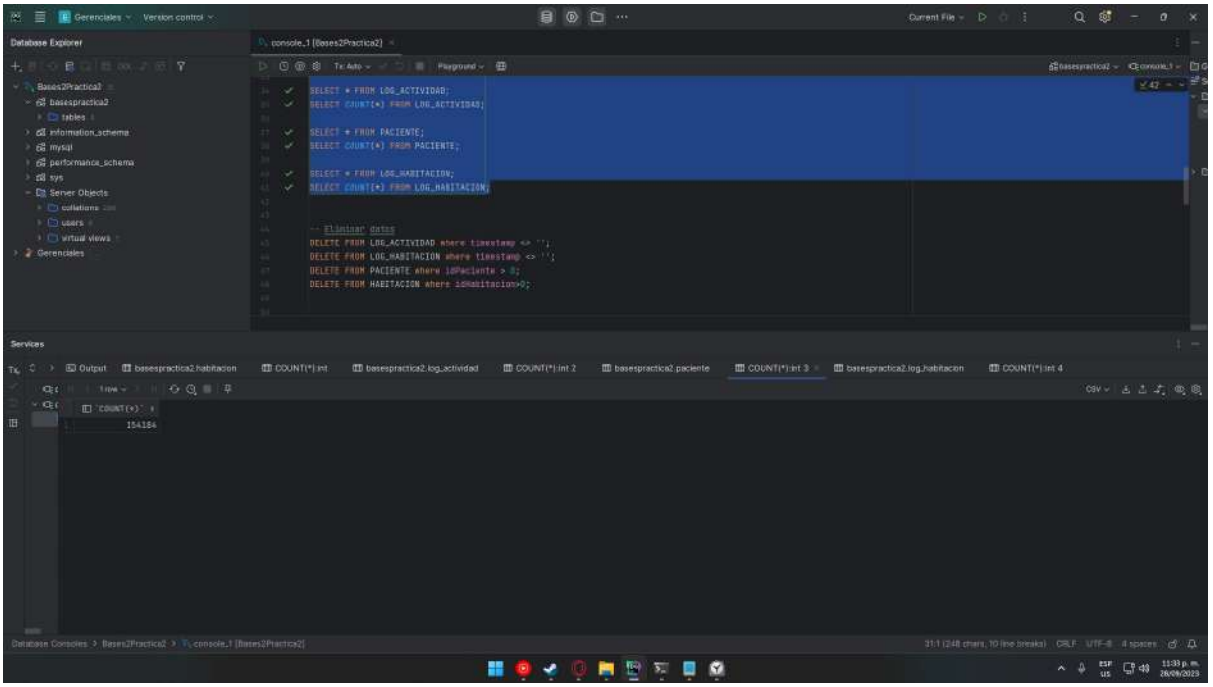
SELECT COUNT(*) FROM log_actividad



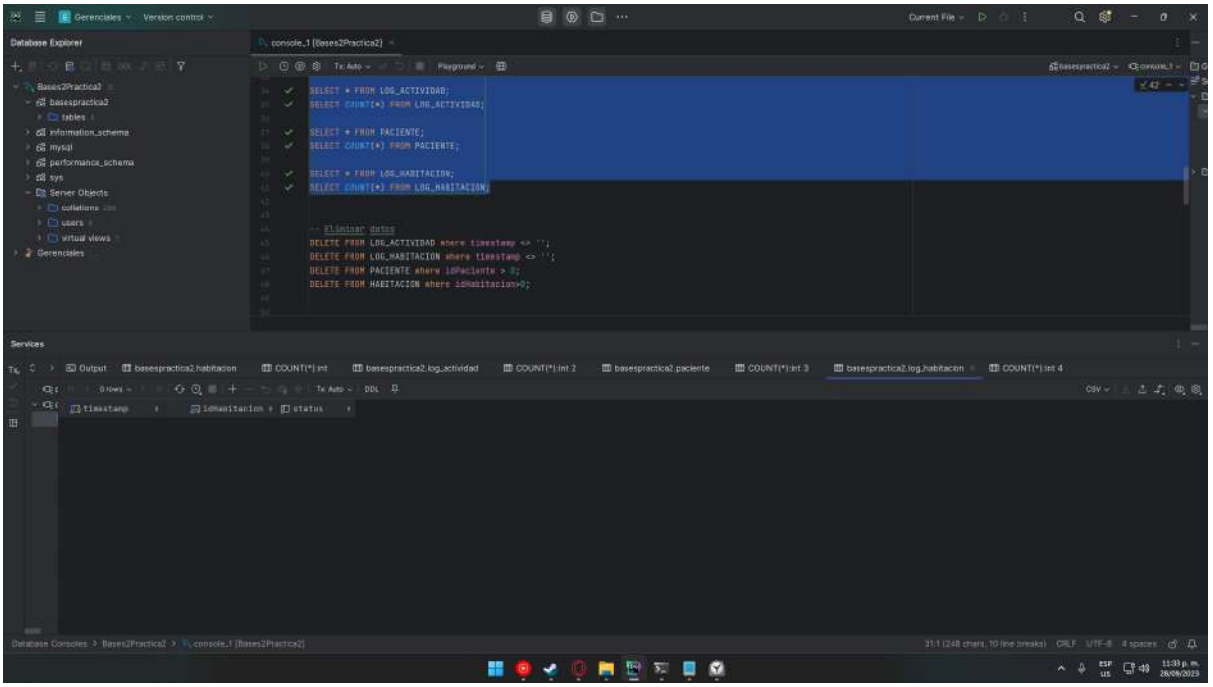
SELECT * FROM paciente



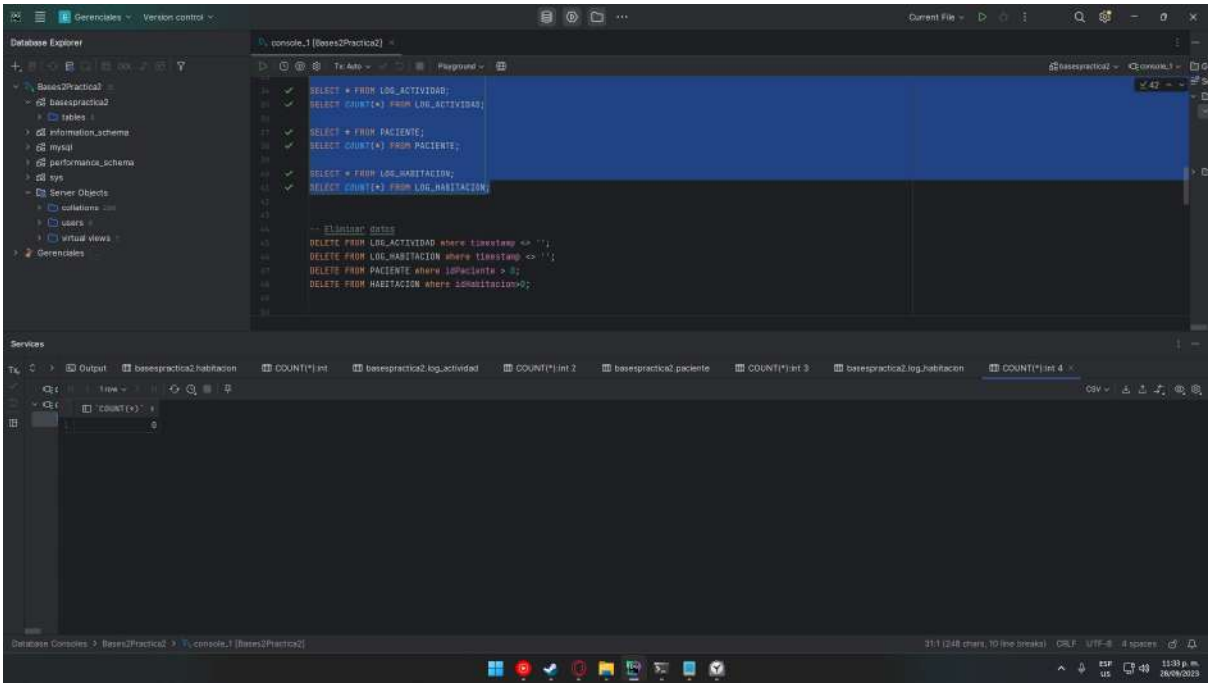
SELECT COUNT(*) FROM paciente



SELECT * FROM log_habitacion

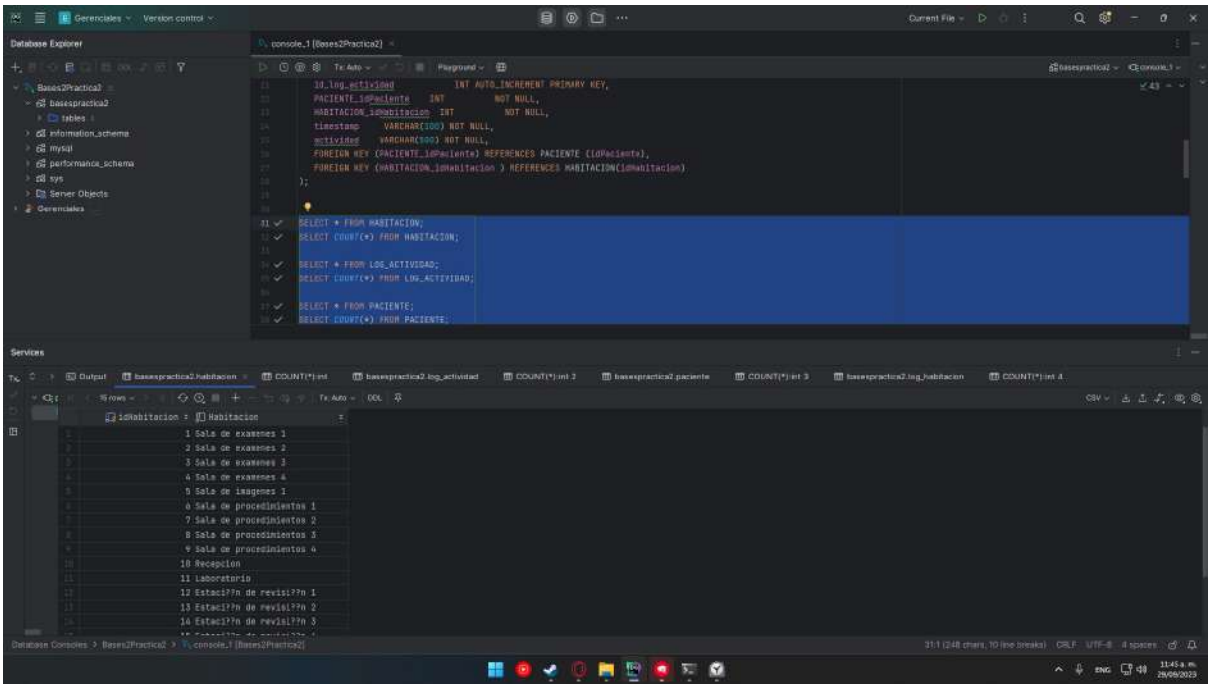


SELECT COUNT(*) FROM log_habitacion

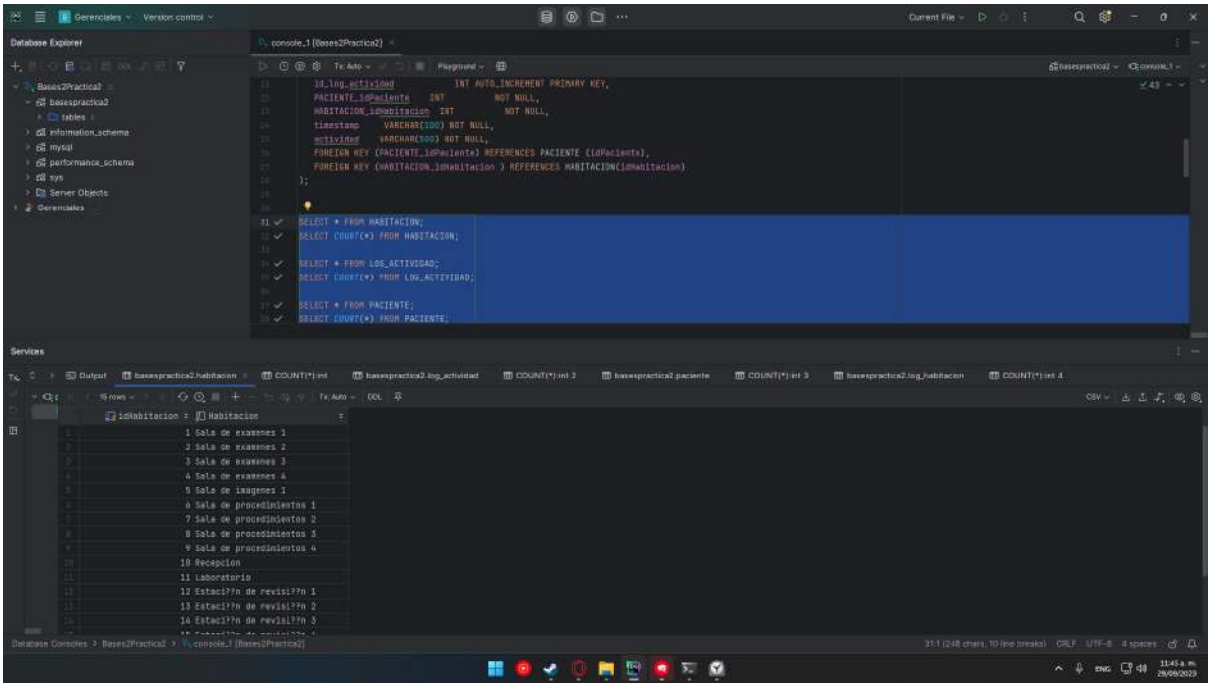

Database Explorer
console_1 [Bases2Practica2]
SELECT * FROM LOG_ACTIVIDAD;
SELECT COUNT(*) FROM LOG_ACTIVIDAD;
SELECT * FROM PACIENTE;
SELECT COUNT(*) FROM PACIENTE;
SELECT * FROM LOG_HABITACION;
SELECT COUNT(*) FROM LOG_HABITACION;
-- Eliminar datos
DELETE FROM LOG_ACTIVIDAD where timestamp <> '';
DELETE FROM LOG_HABITACION where timestamp <> '';
DELETE FROM PACIENTE where idPaciente > 0;
DELETE FROM HABITACION where idHabitacion>0;
Services
COUNT(*)
0

Día 10:
Eliminación de datos
Restauración de full backup 5
-- Get-Content "G:\Backups\full_backup_dia5.sql" | mysql -u root -p basespractica2

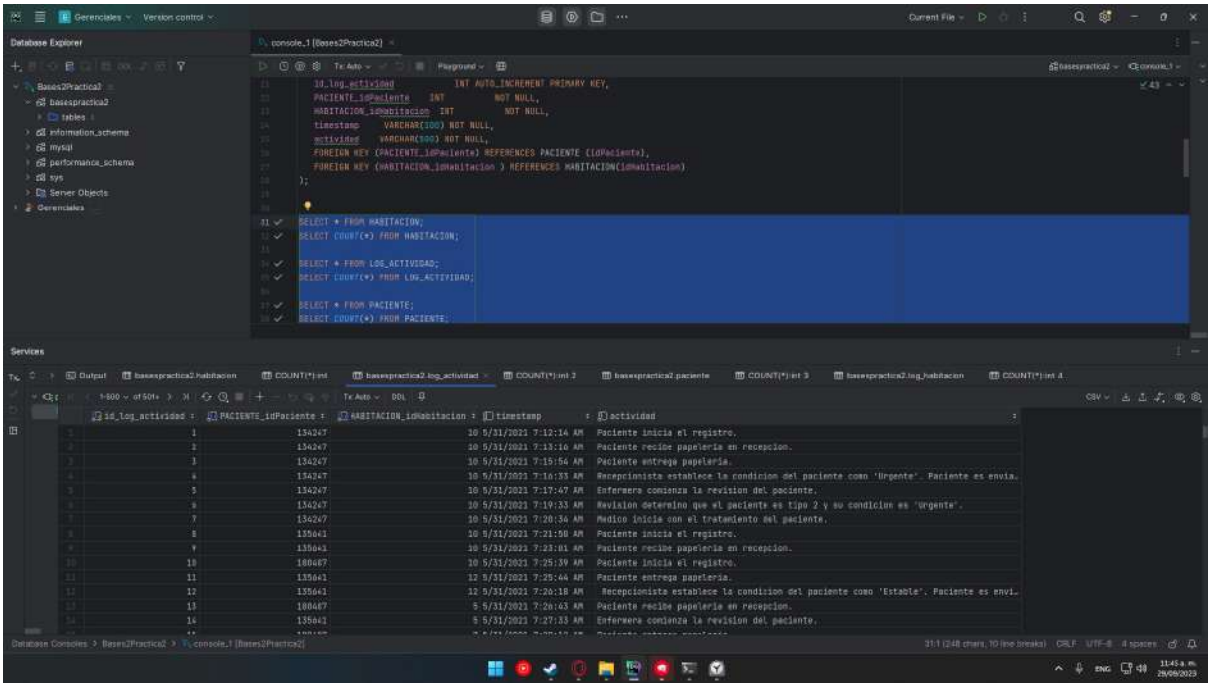
SELECT * FROM habitacion



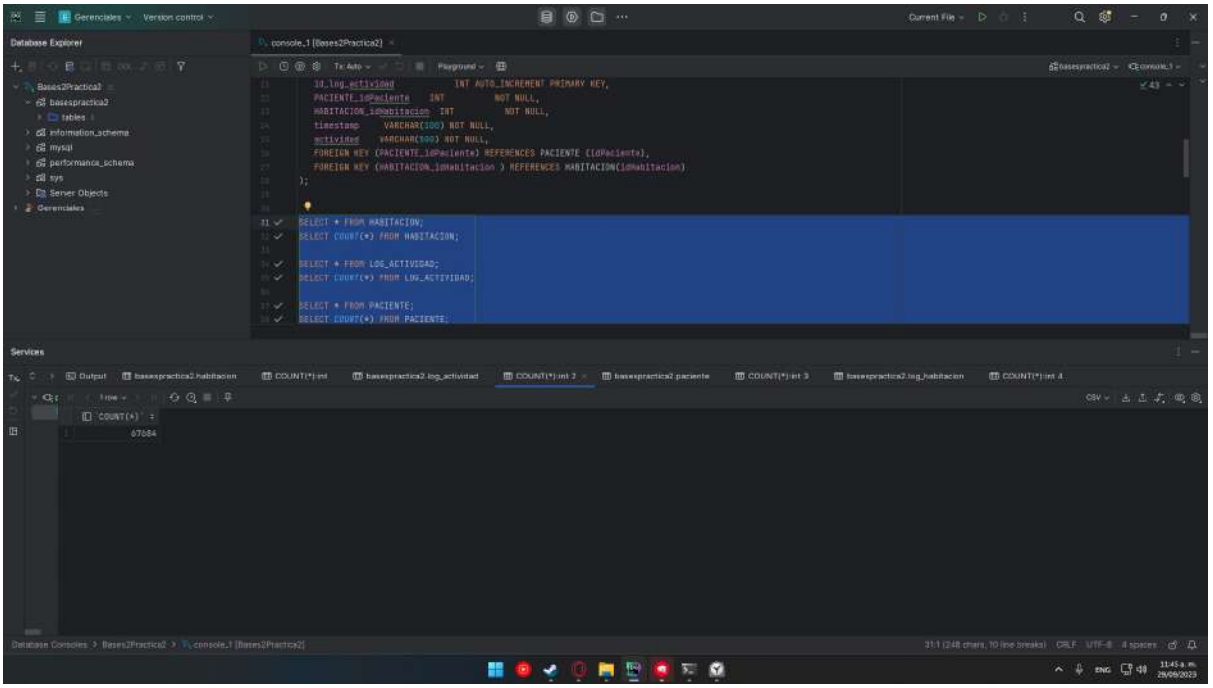
SELECT COUNT(*) FROM habitacion



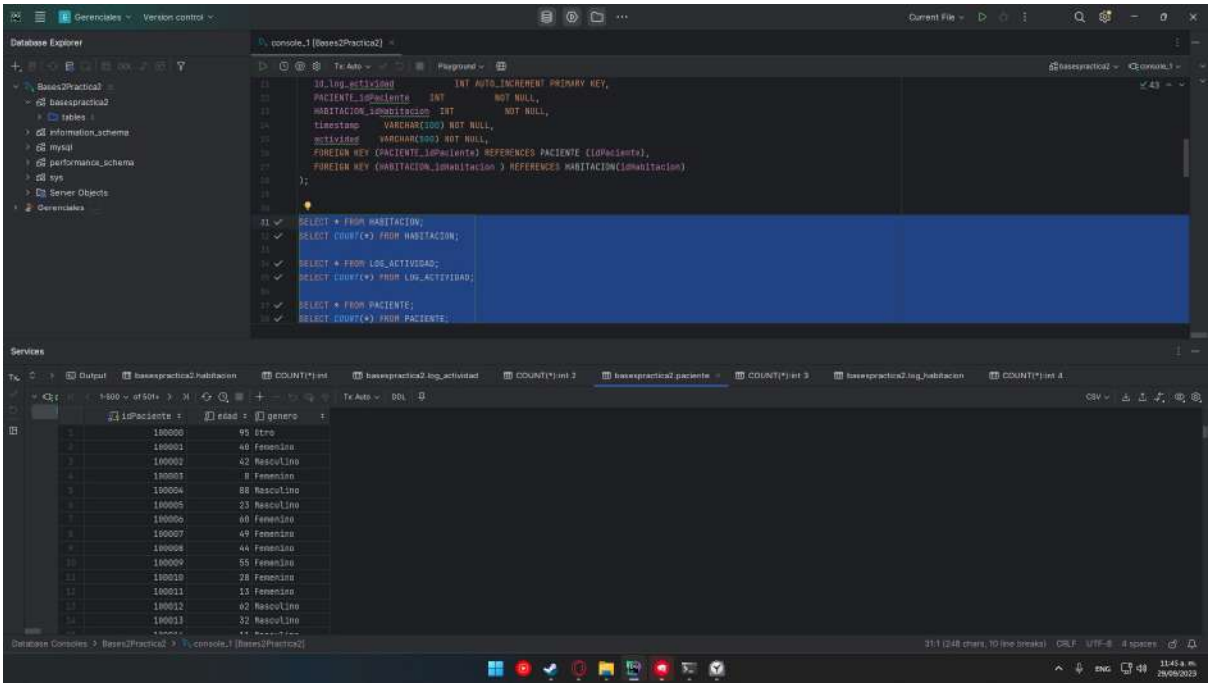
SELECT * FROM log_actividad



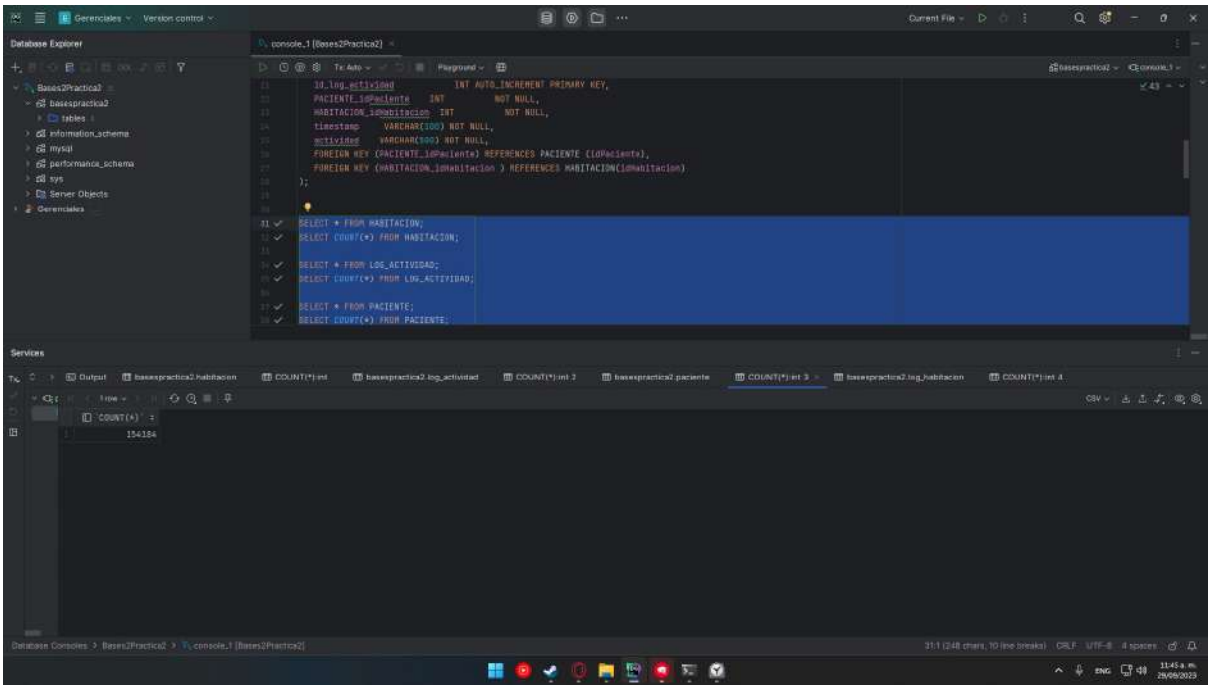
SELECT COUNT(*) FROM log_actividad



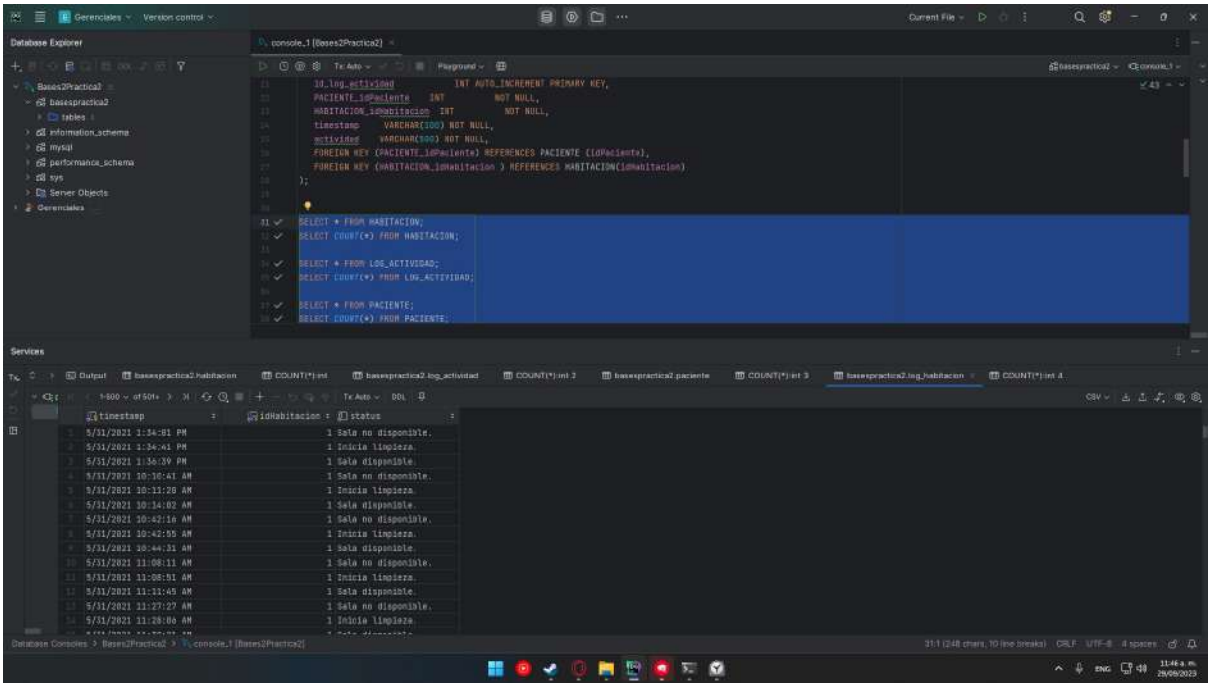
SELECT * FROM paciente



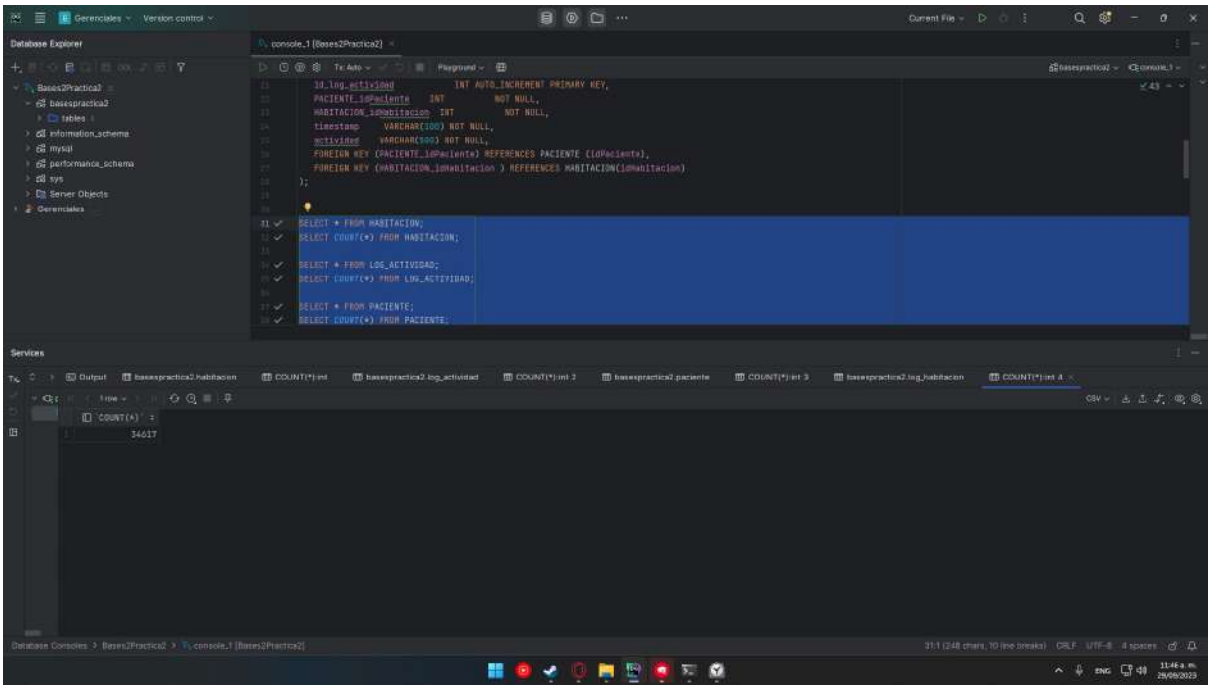
SELECT COUNT(*) FROM paciente



SELECT * FROM log_habitacion



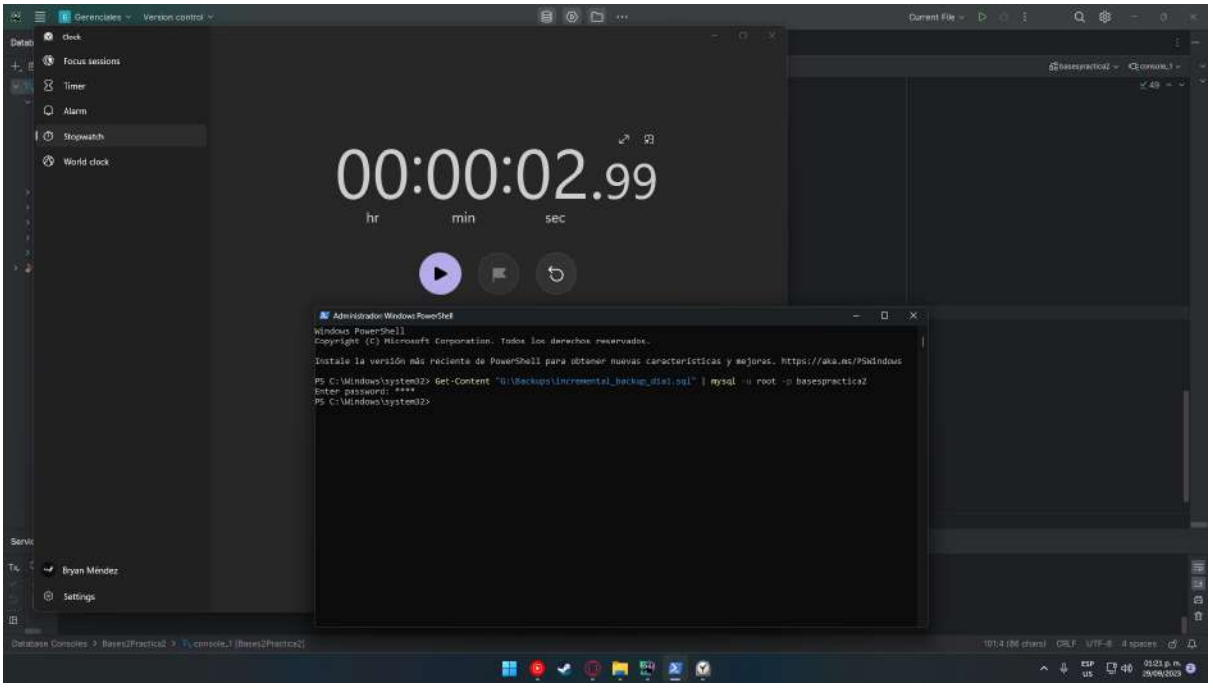
SELECT COUNT(*) FROM log_habitacion



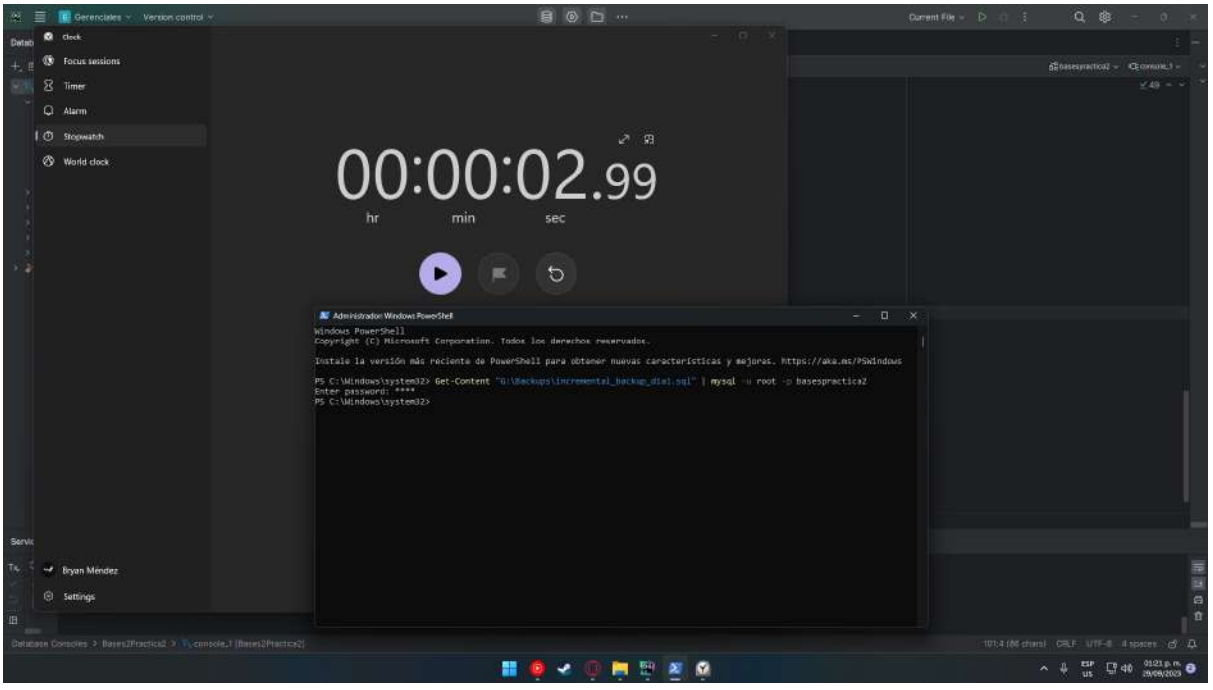
Día 11:

Restauración de backup incremental 1

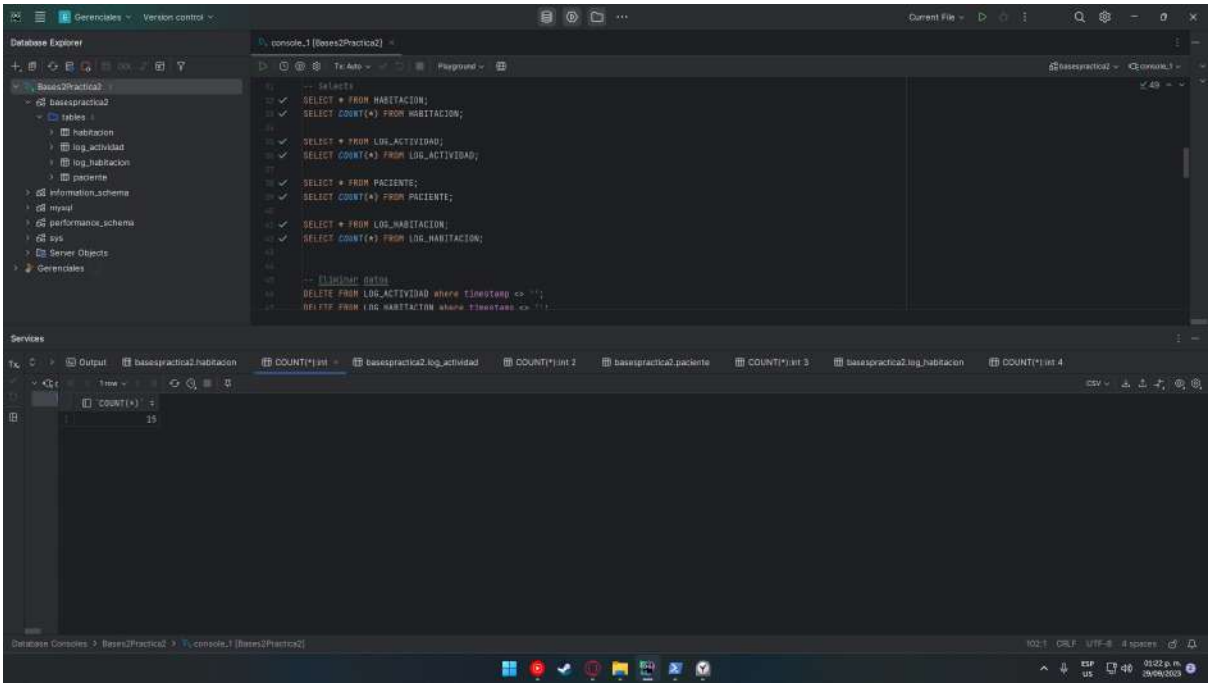
-- Get-Content "G:\Backups\incremental_backup_dia1.sql" | mysql -u root -p basespractica2



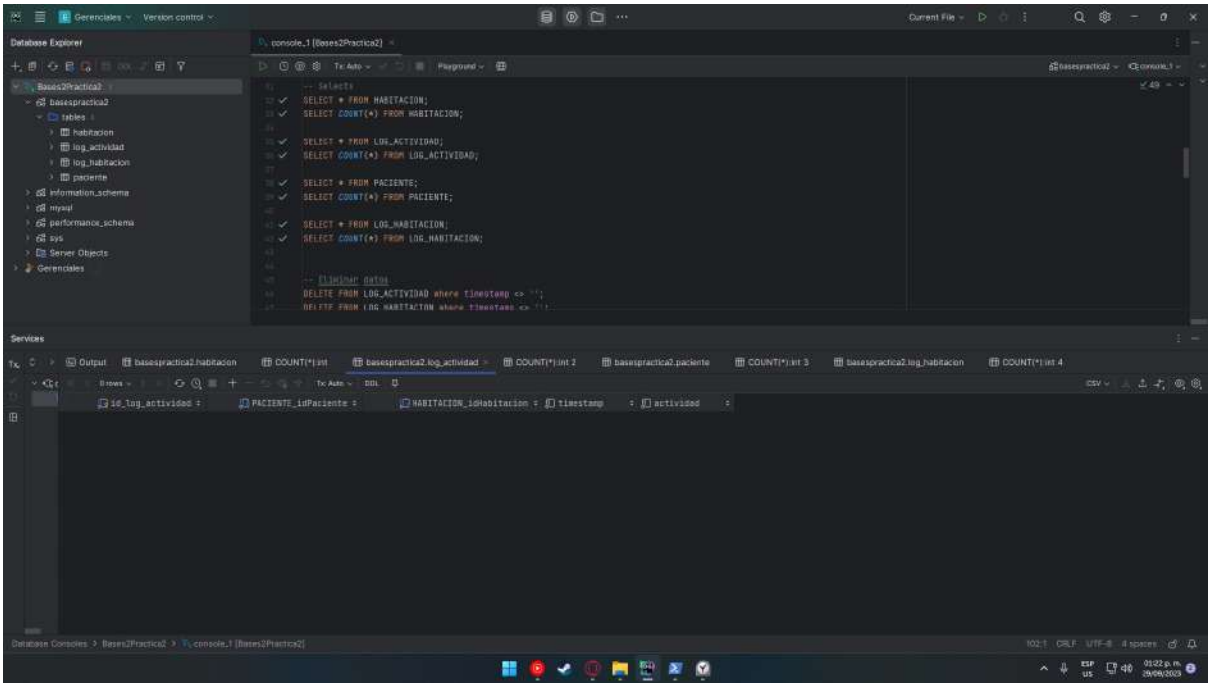
SELECT * FROM habitacion



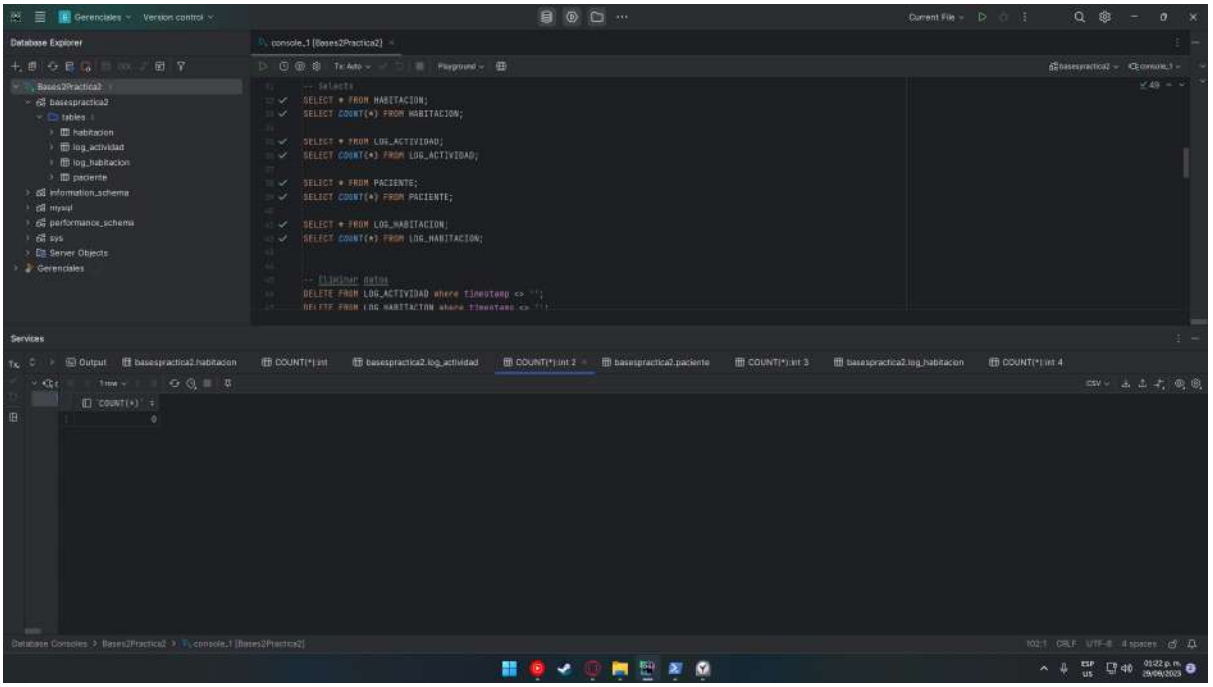
SELECT COUNT(*) FROM habitacion



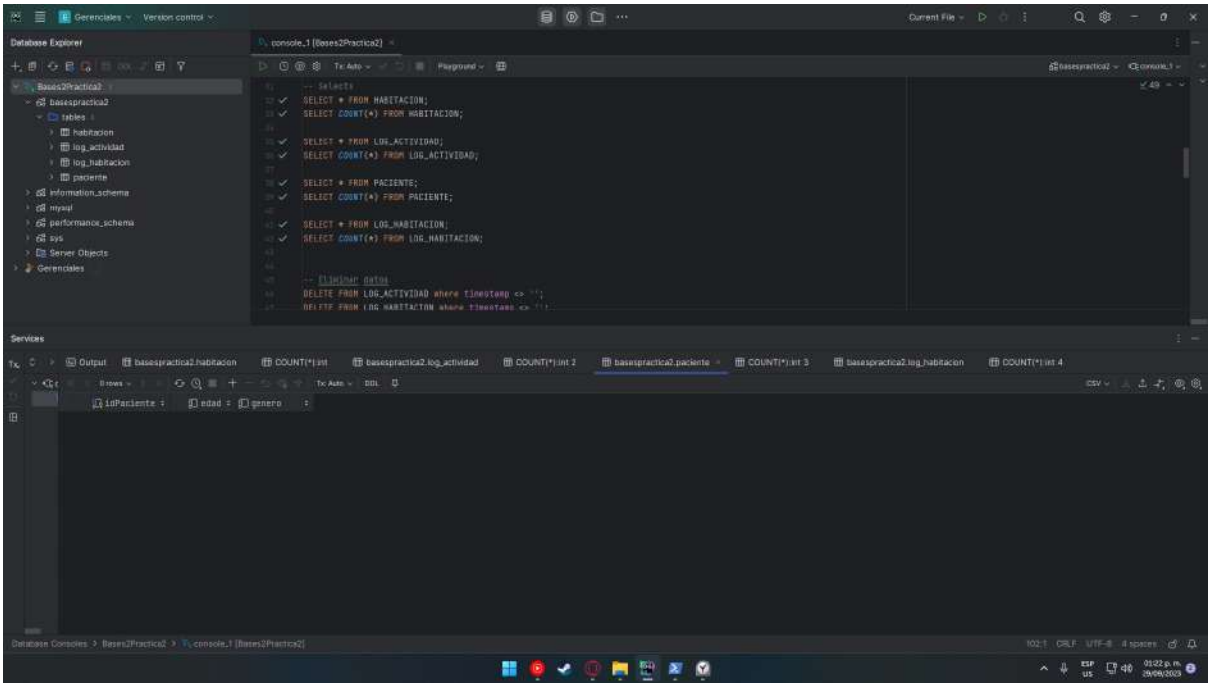
SELECT * FROM log_actividad



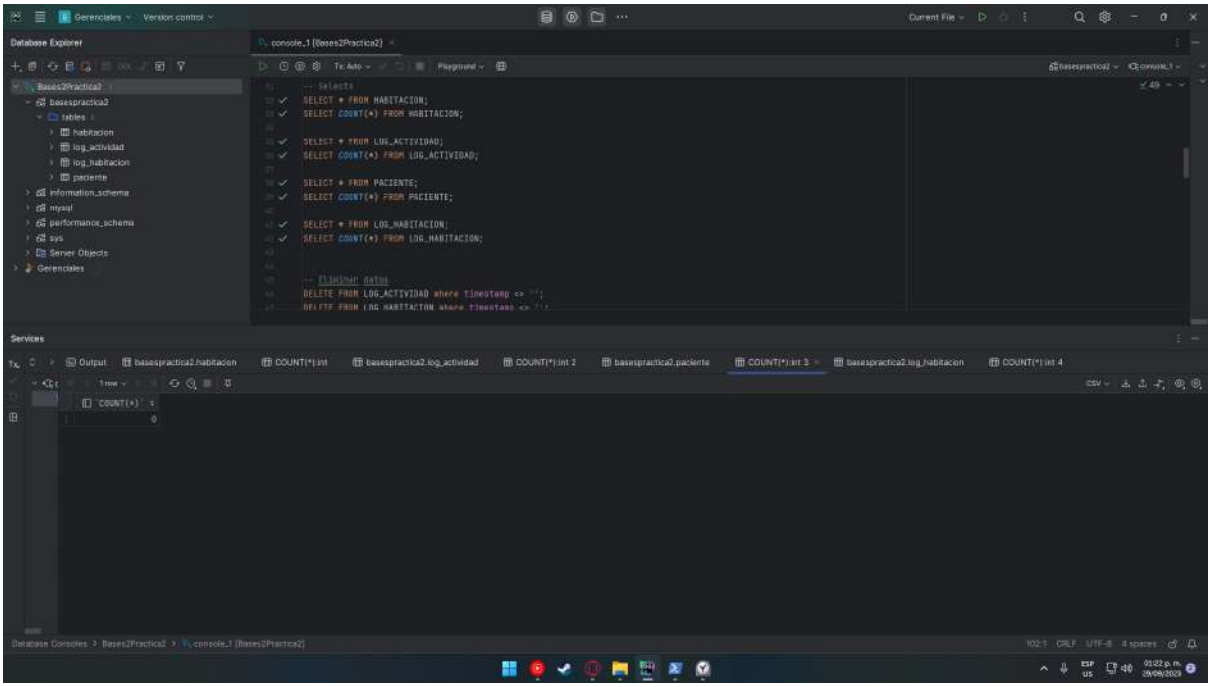
SELECT COUNT(*) FROM log_actividad



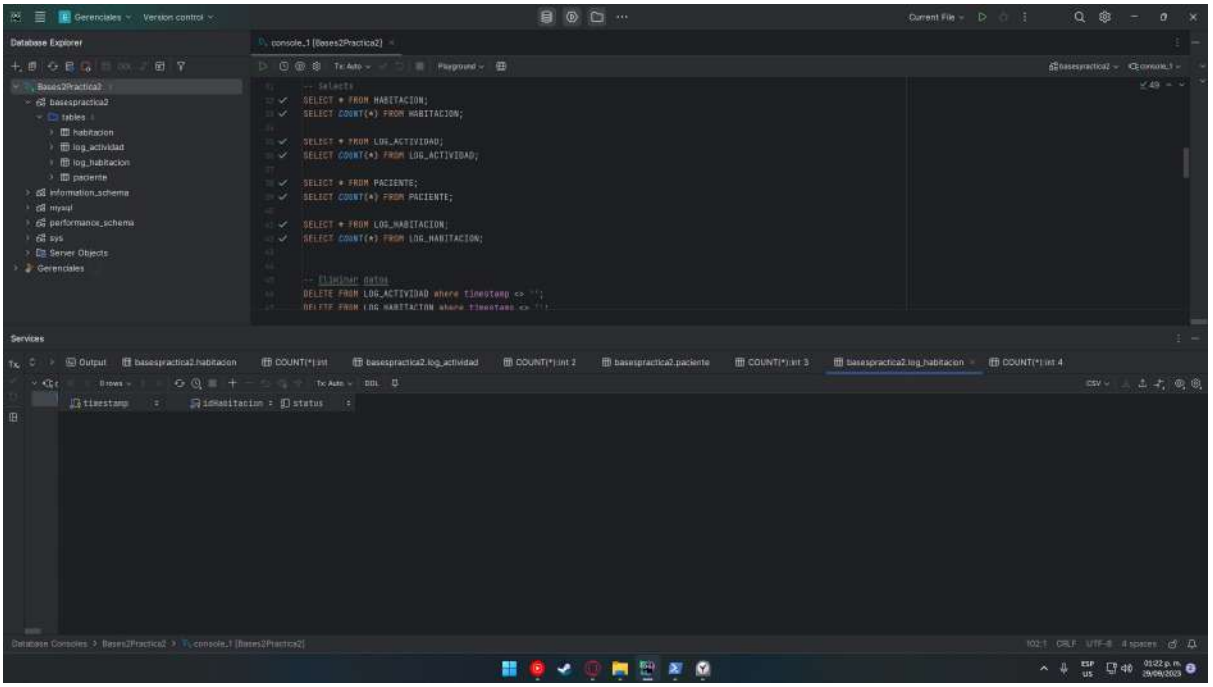
SELECT * FROM paciente



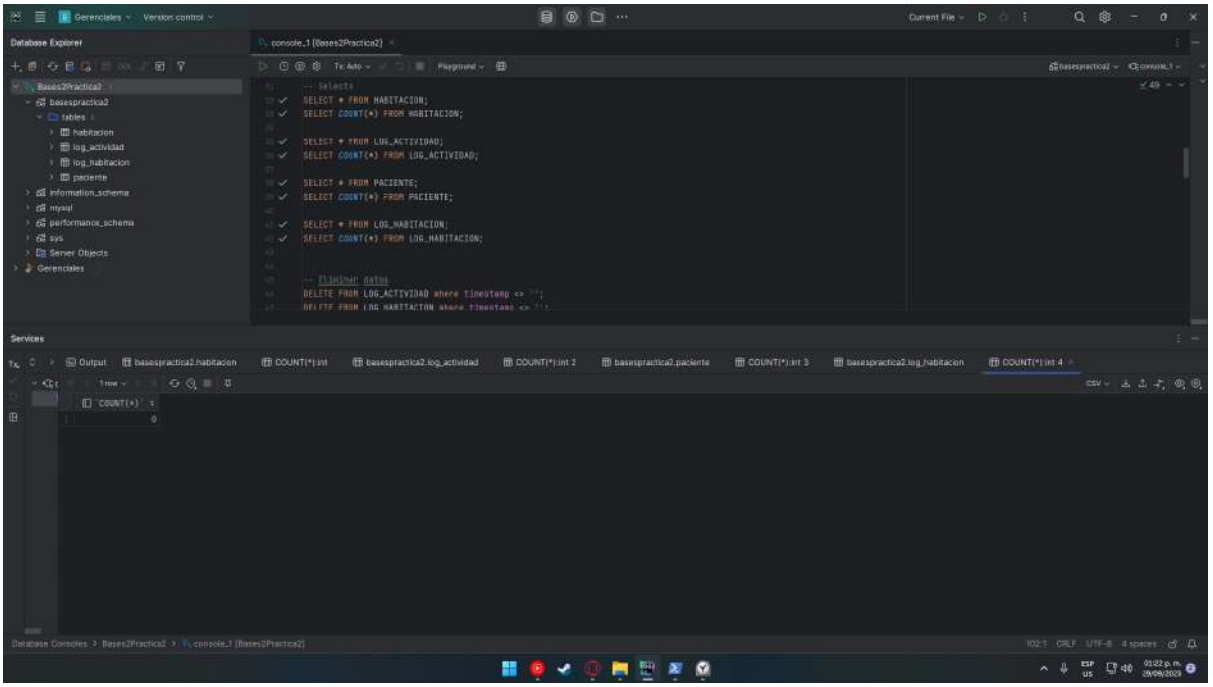
SELECT COUNT(*) FROM paciente



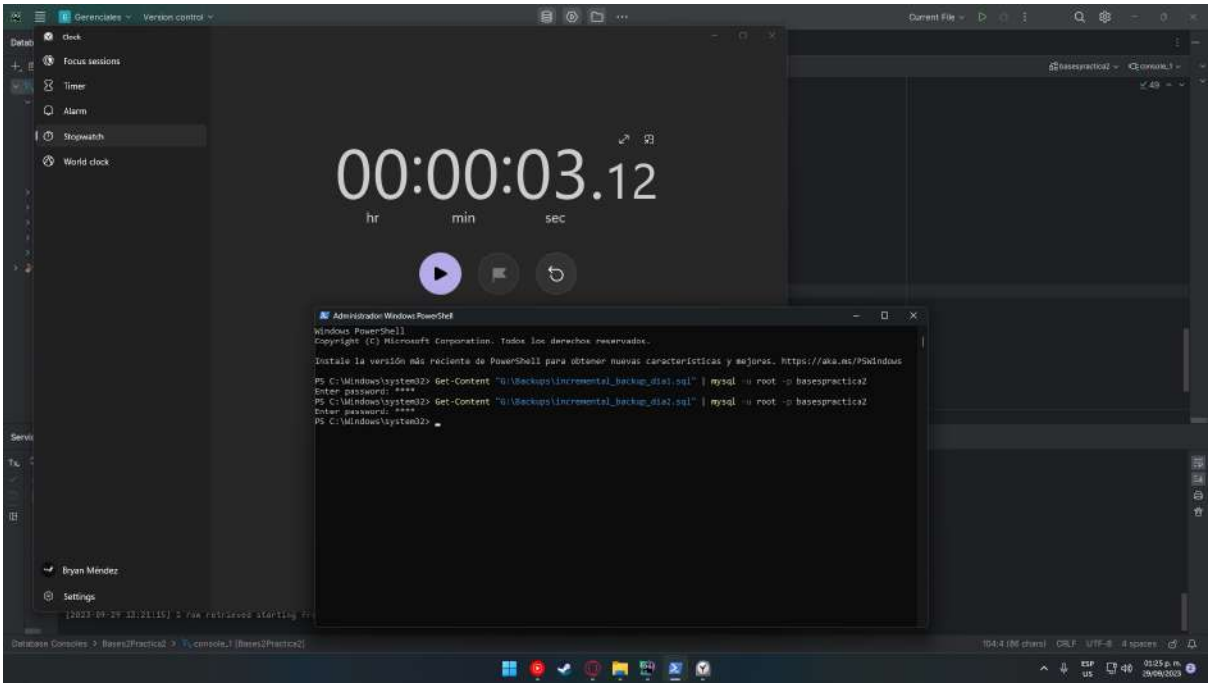
SELECT * FROM log_habitacion



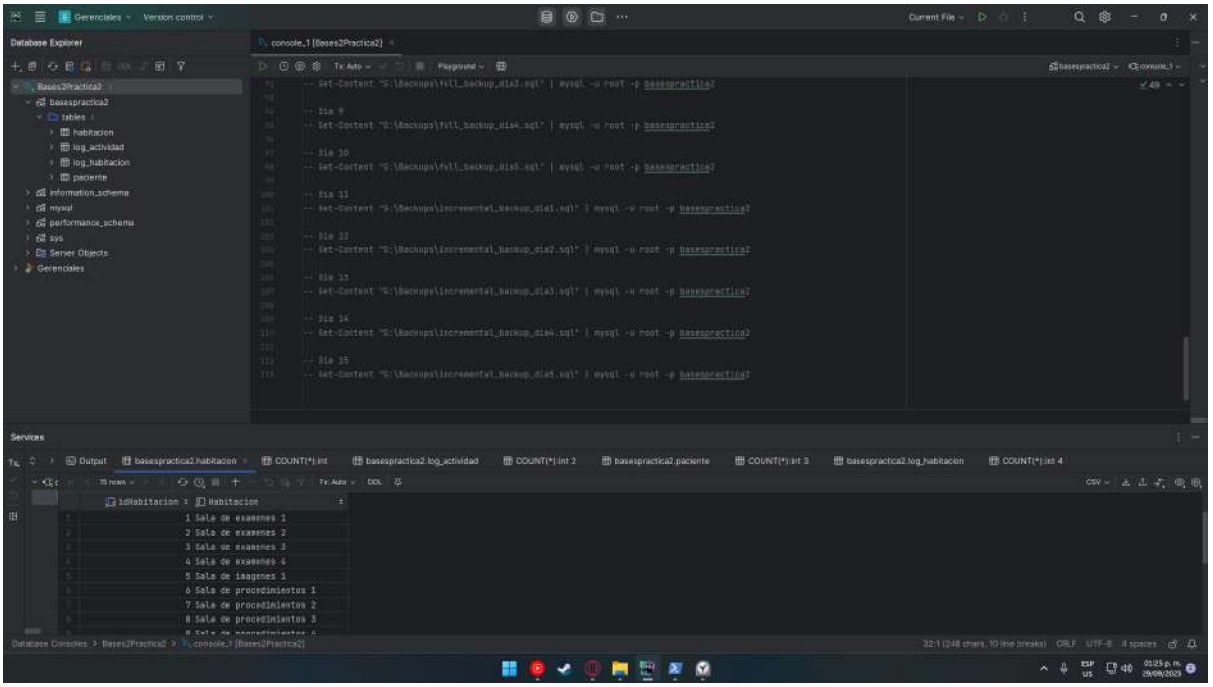
SELECT COUNT(*) FROM log_habitacion


Database Explorer
console_1 [Bases2Practica2]
-- Selects
SELECT * FROM HABITACION;
SELECT COUNT(*) FROM HABITACION;
SELECT * FROM LOG_ACTIVIDAD;
SELECT COUNT(*) FROM LOG_ACTIVIDAD;
SELECT * FROM PACIENTE;
SELECT COUNT(*) FROM PACIENTE;
SELECT * FROM LOG_HABITACION;
SELECT COUNT(*) FROM LOG_HABITACION;
-- Eliminar datos
DELETE FROM LOG_ACTIVIDAD where timestamp <> '';
Services
COUNT(*)
0

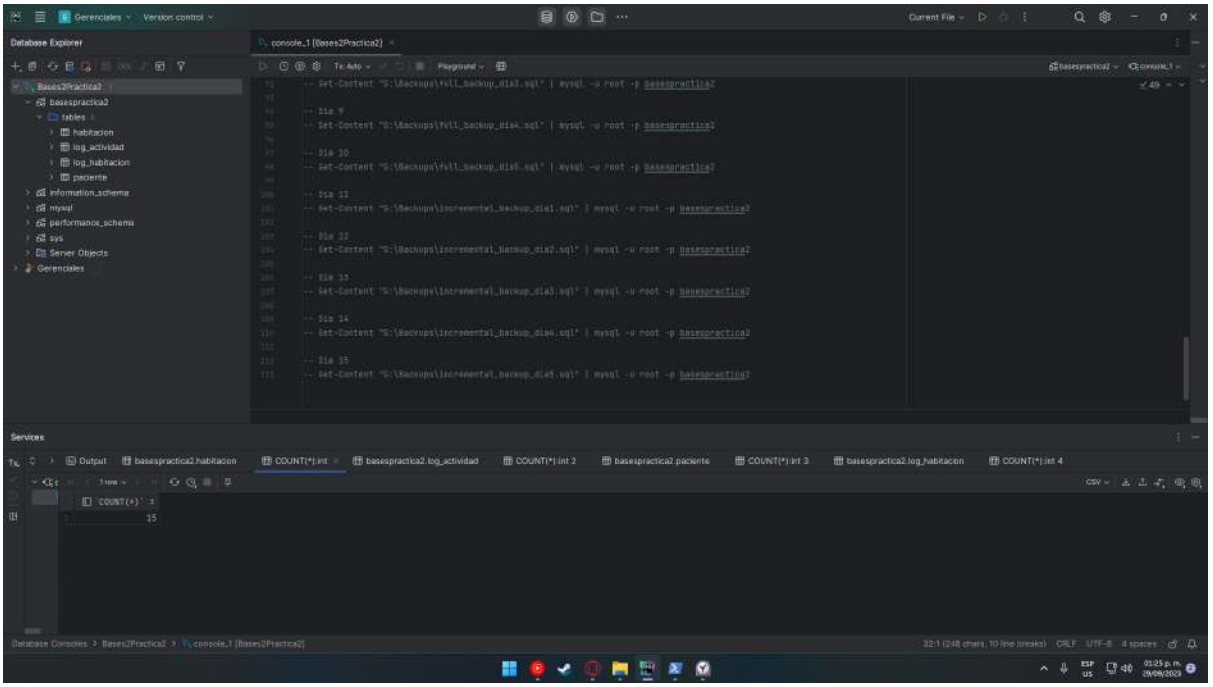
Día 12:
Restauración de backup incremental 2
-- Get-Content "G:\Backups\incremental_backup_dia2.sql" | mysql -u root -p basespractica2



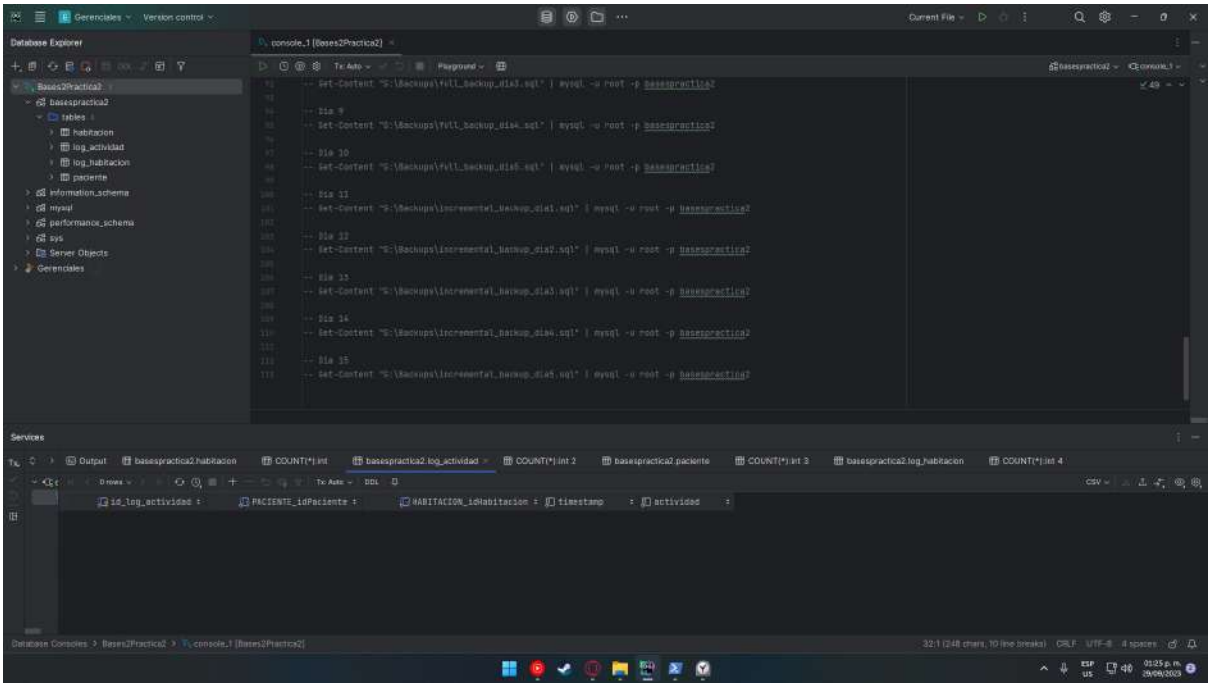
SELECT * FROM habitacion



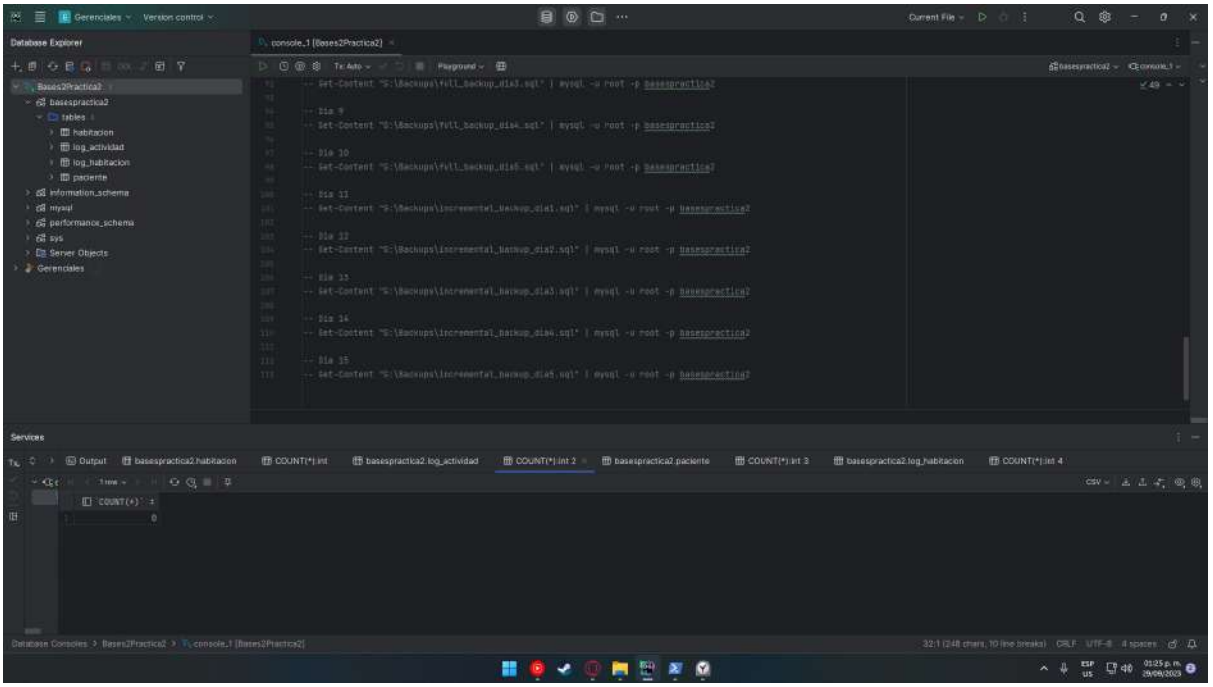
SELECT COUNT(*) FROM habitacion



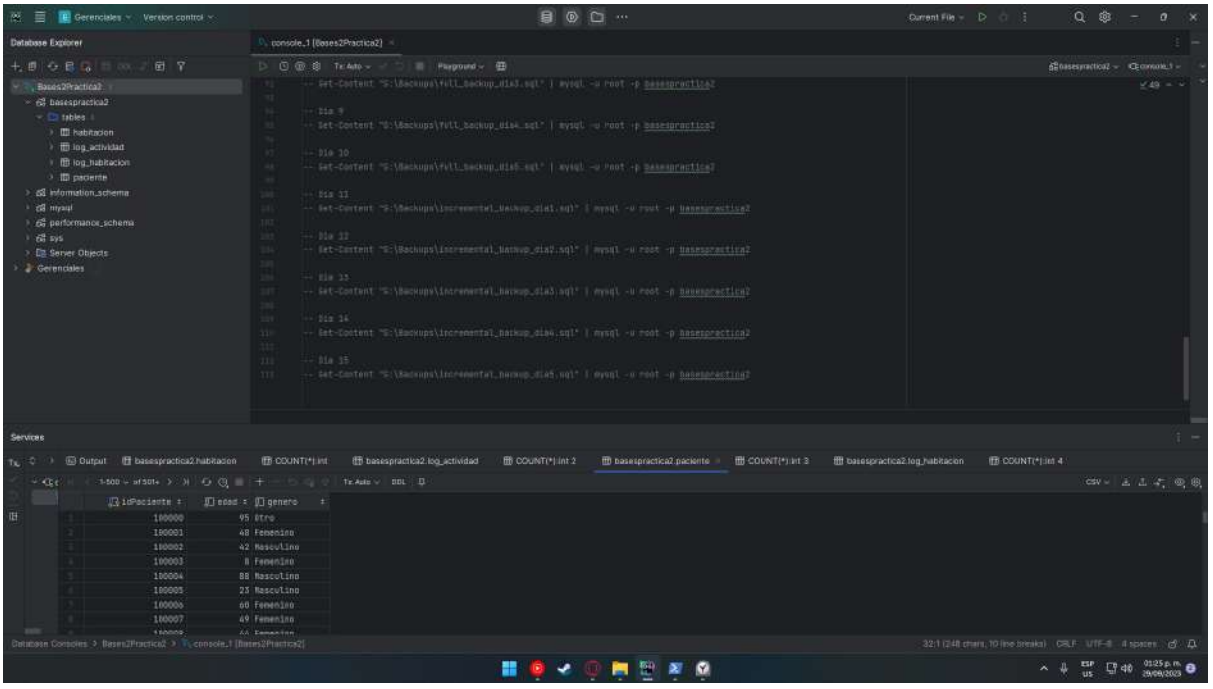
SELECT * FROM log_actividad



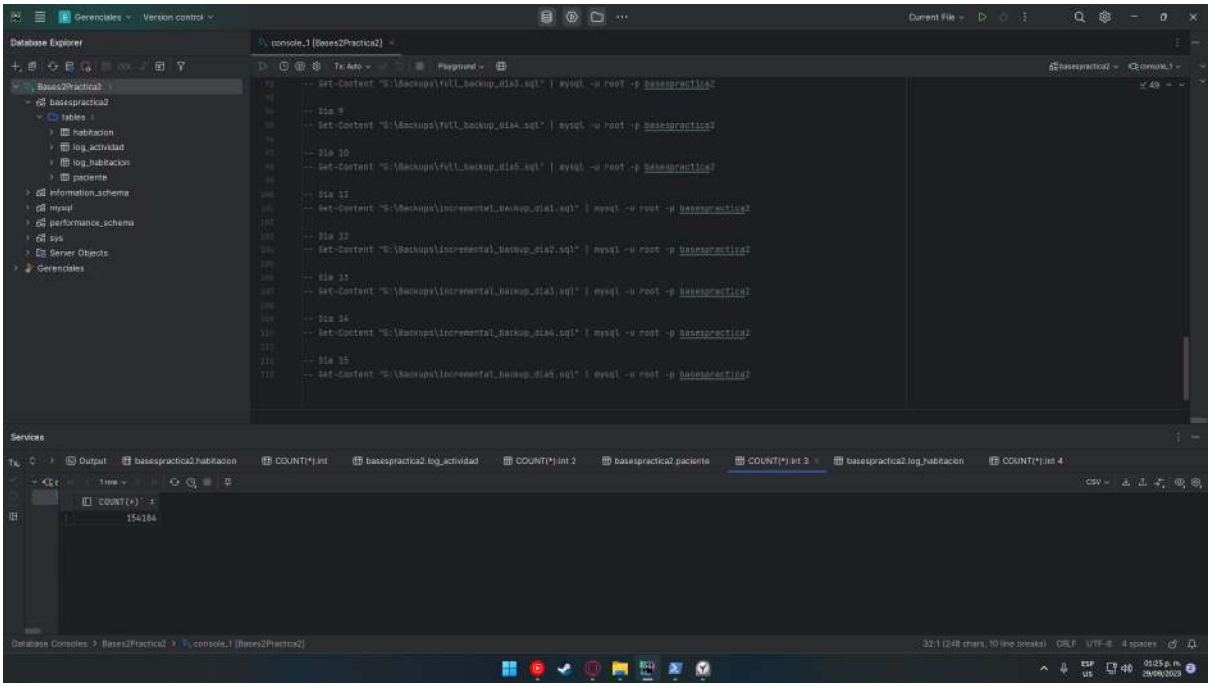
SELECT COUNT(*) FROM log_actividad



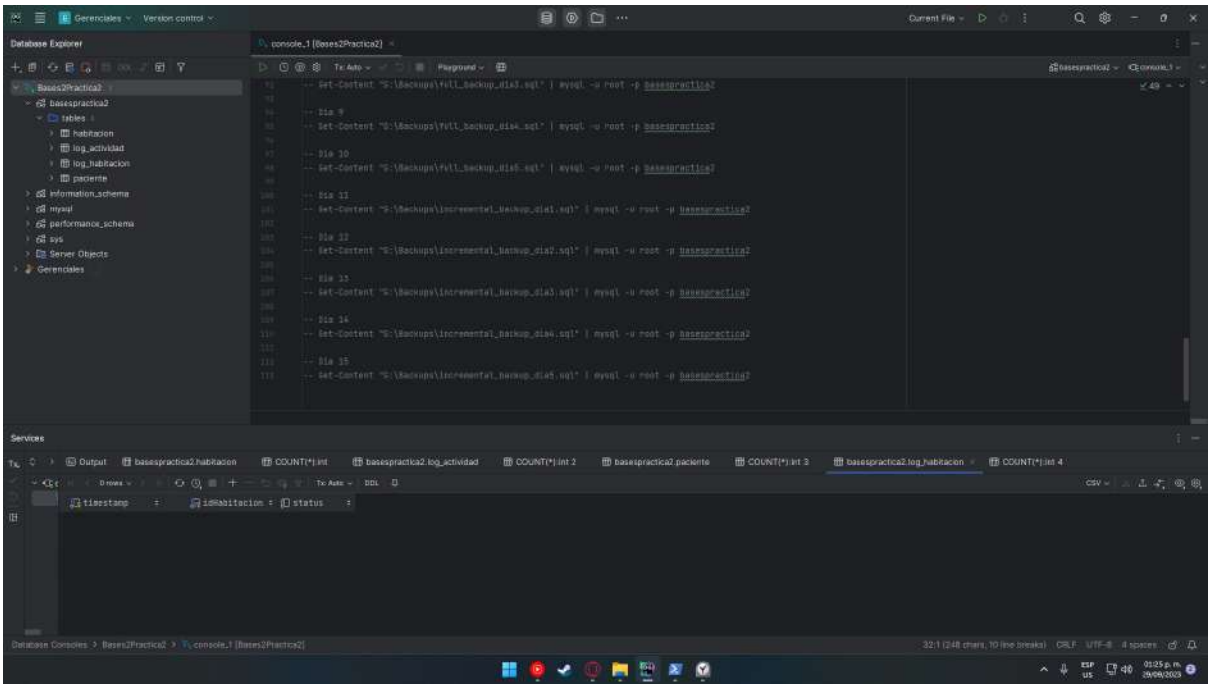
SELECT * FROM paciente



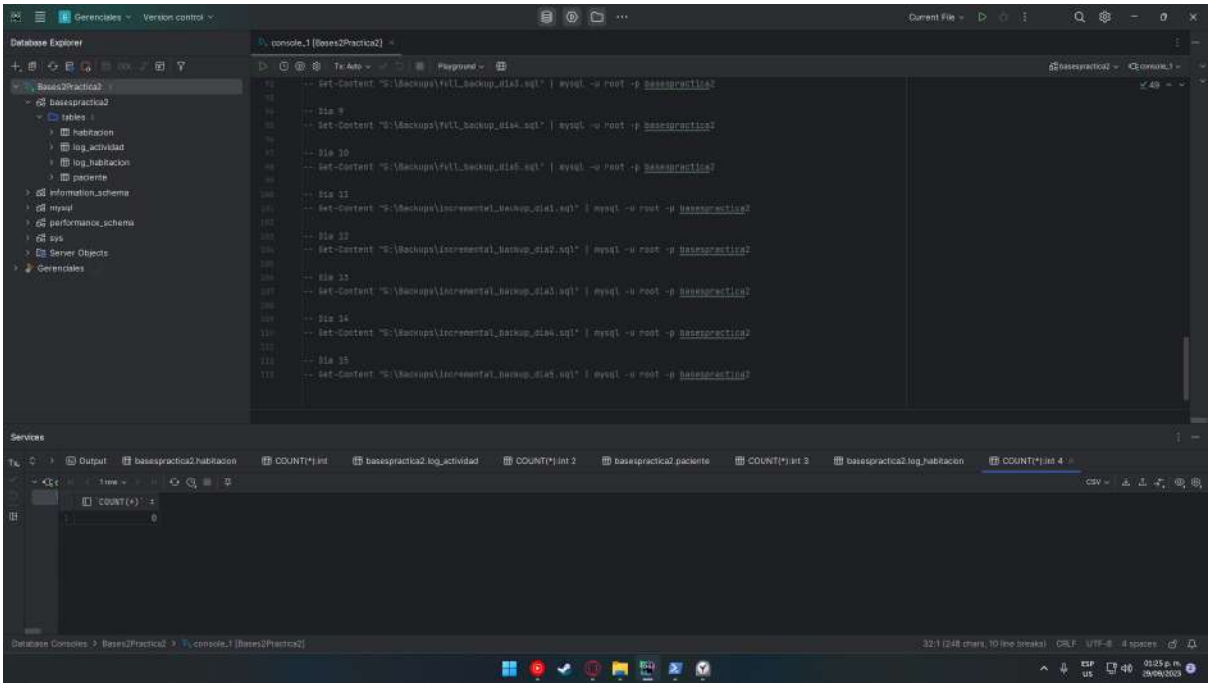
SELECT COUNT(*) FROM paciente



SELECT * FROM log_habitacion



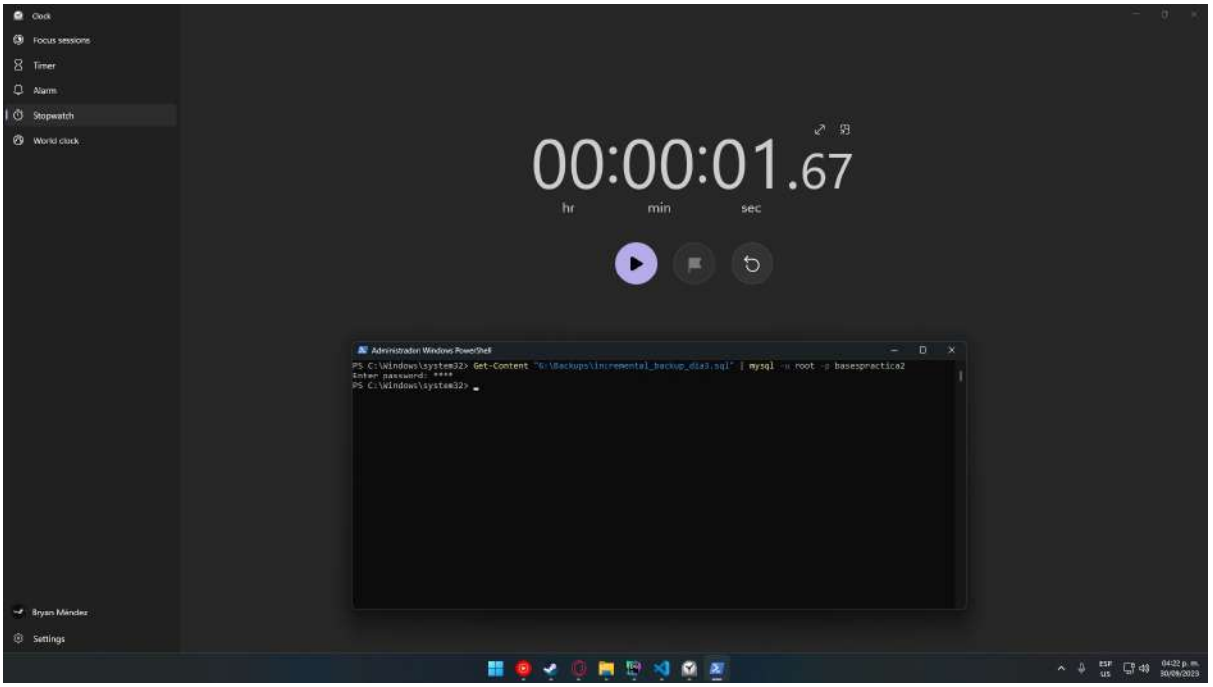
SELECT COUNT(*) FROM log_habitacion


Gerenciales
Version control
Current File
Database Explorer
console_1 [Bases2Practica2]
Bases2Practica2
basespractica2
tables
habitacion
log_actividad
log_habitacion
paciente
information_schema
mysql
performance_schema
sys
Server Objects
Gerenciales
Playground
-- Set-Content "G:\Backups\full_backup_dia3.sql" | mysql -u root -p basespractica2
-- Dia 9
-- Set-Content "G:\Backups\full_backup_dia4.sql" | mysql -u root -p basespractica2
-- Dia 10
-- Set-Content "G:\Backups\full_backup_dia5.sql" | mysql -u root -p basespractica2
-- Dia 11
-- Set-Content "G:\Backups\incremental_backup_dia1.sql" | mysql -u root -p basespractica2
-- Dia 12
-- Set-Content "G:\Backups\incremental_backup_dia2.sql" | mysql -u root -p basespractica2
-- Dia 13
-- Set-Content "G:\Backups\incremental_backup_dia3.sql" | mysql -u root -p basespractica2
-- Dia 14
-- Set-Content "G:\Backups\incremental_backup_dia4.sql" | mysql -u root -p basespractica2
-- Dia 15
-- Set-Content "G:\Backups\incremental_backup_dia5.sql" | mysql -u root -p basespractica2
Services
Output
basespractica2.habitacion
COUNT(*) int
basespractica2.log_actividad
COUNT(*) int 2
basespractica2.paciente
COUNT(*) int 3
basespractica2.log_habitacion
COUNT(*) int 4
COUNT(*)
0
Database Consoles > Bases2Practica2 > console_1 [Bases2Practica2]

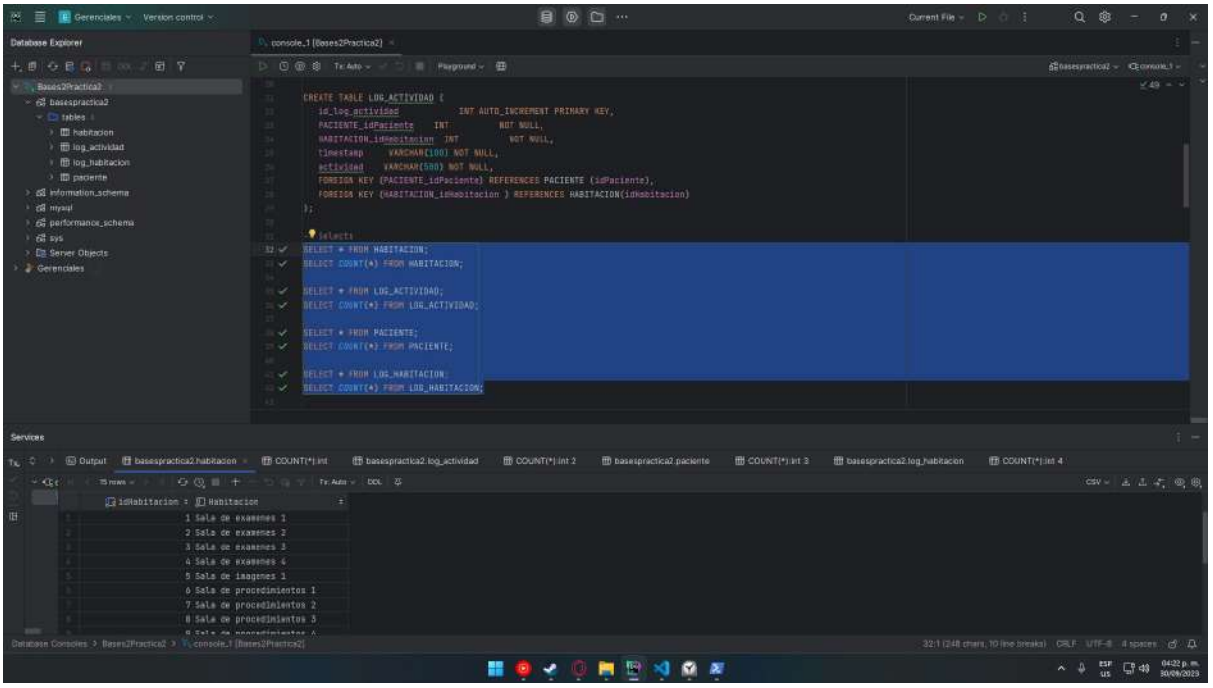
Día 13:

Restauración de backup incremental 3

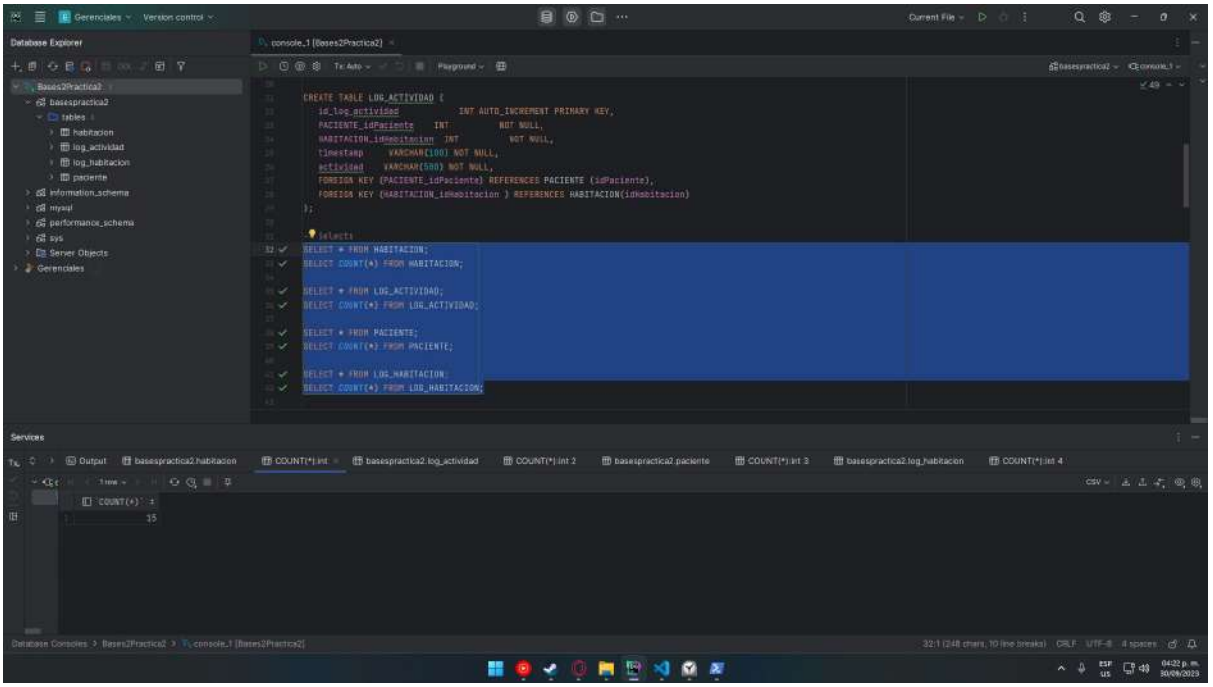
-- Get-Content "G:\Backups\incremental_backup_dia3.sql" | mysql -u root -p basespractica2



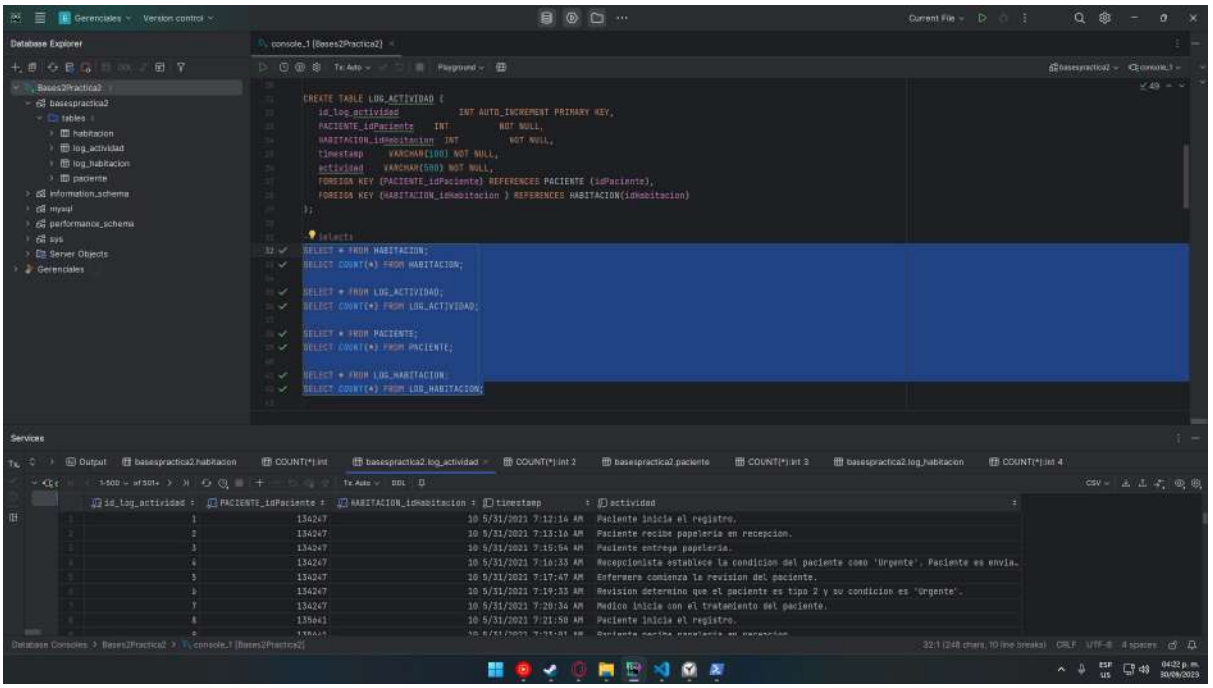
SELECT * FROM habitacion



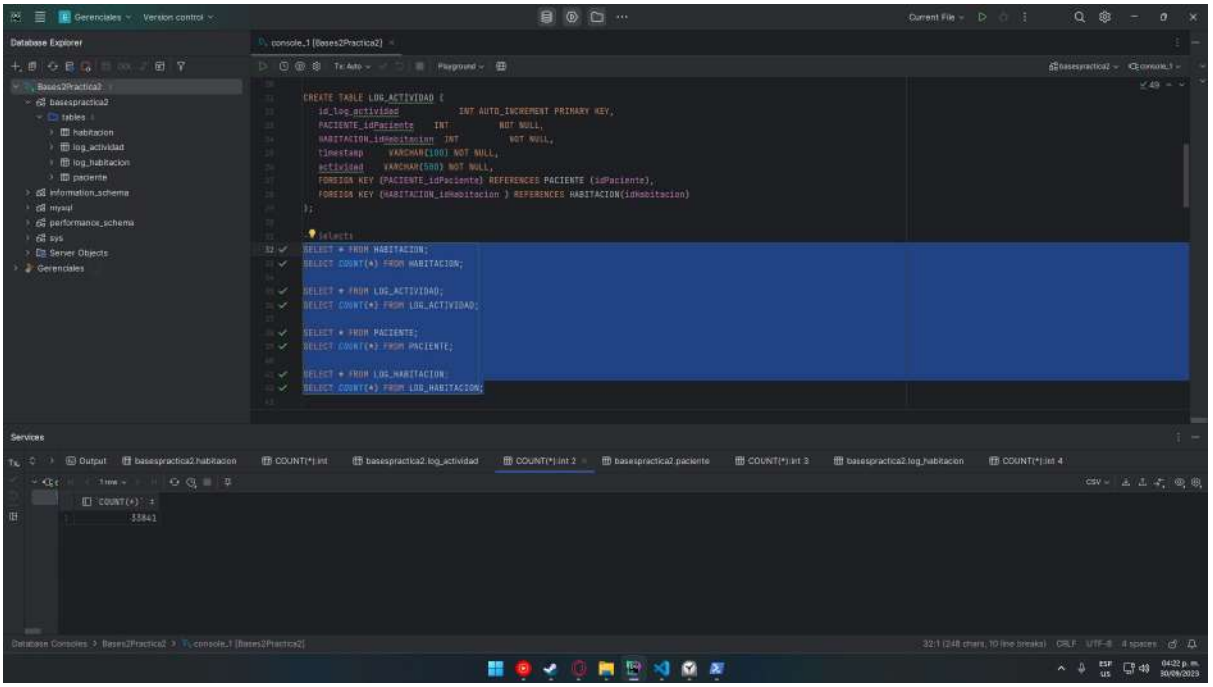
SELECT COUNT(*) FROM habitacion



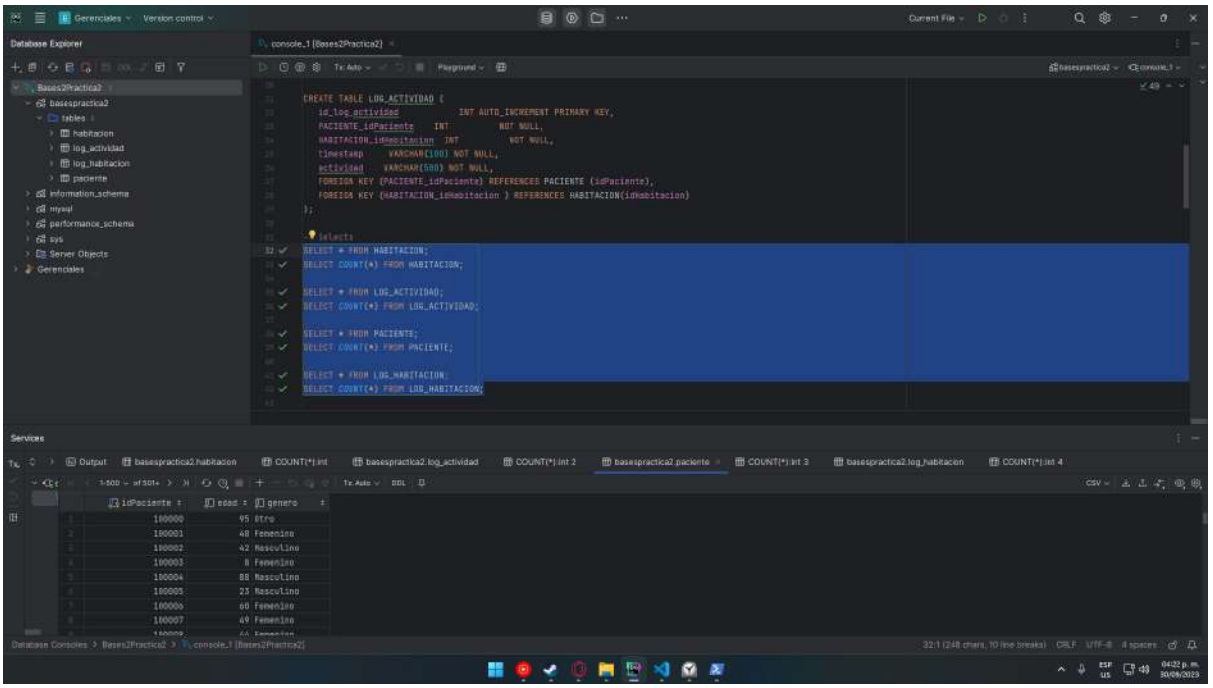
SELECT * FROM log_actividad



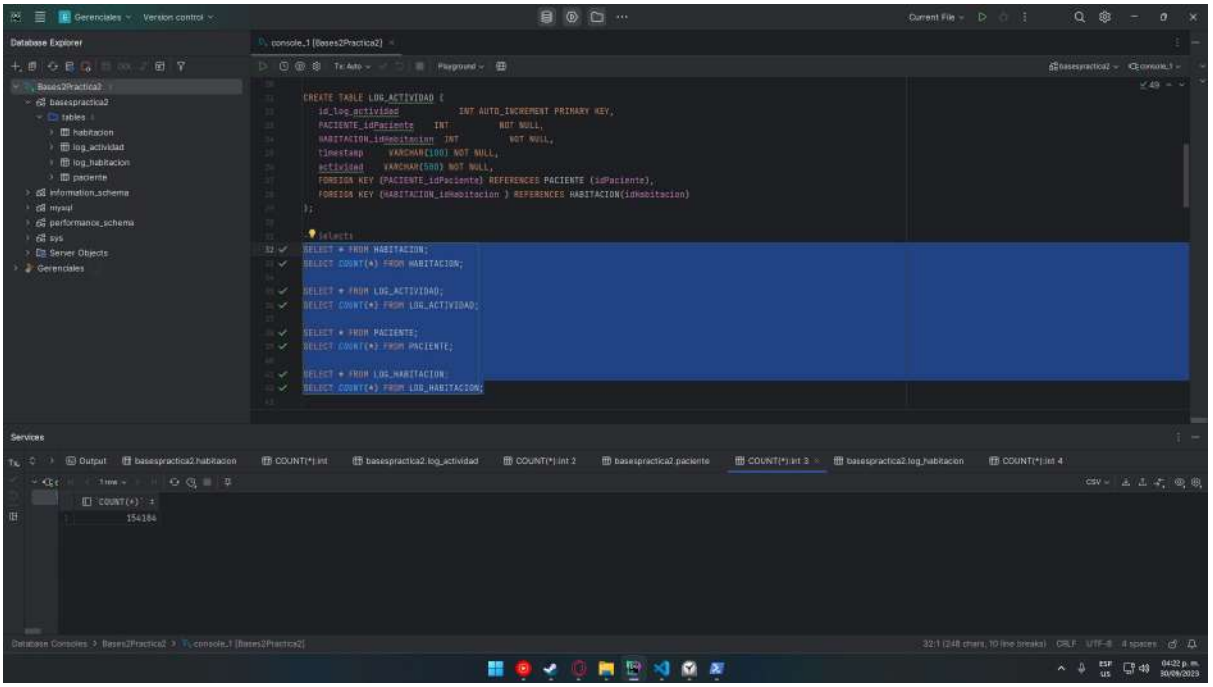
SELECT COUNT(*) FROM log_actividad



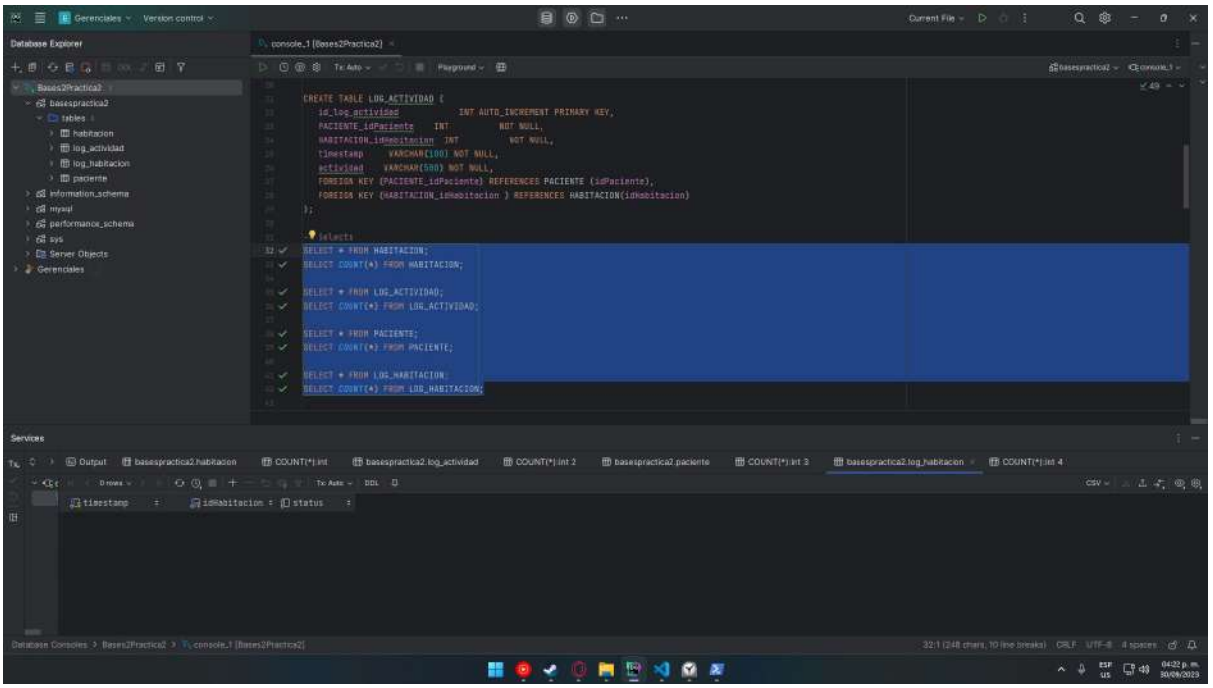
SELECT * FROM paciente



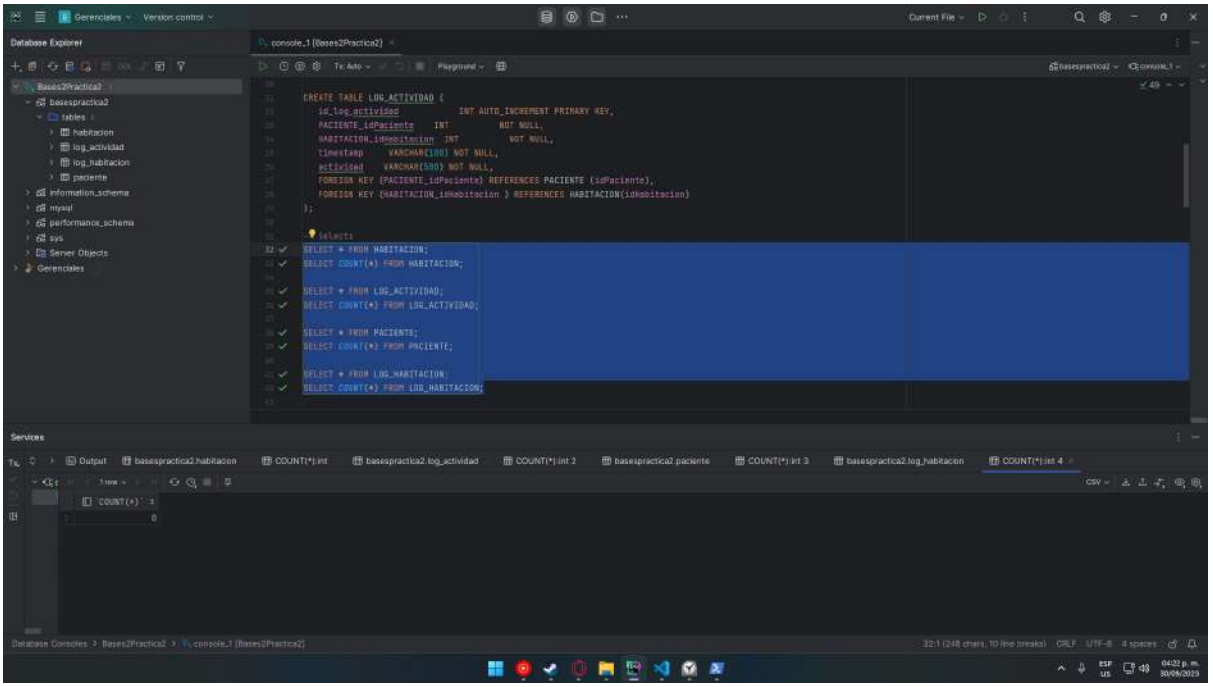
SELECT COUNT(*) FROM paciente



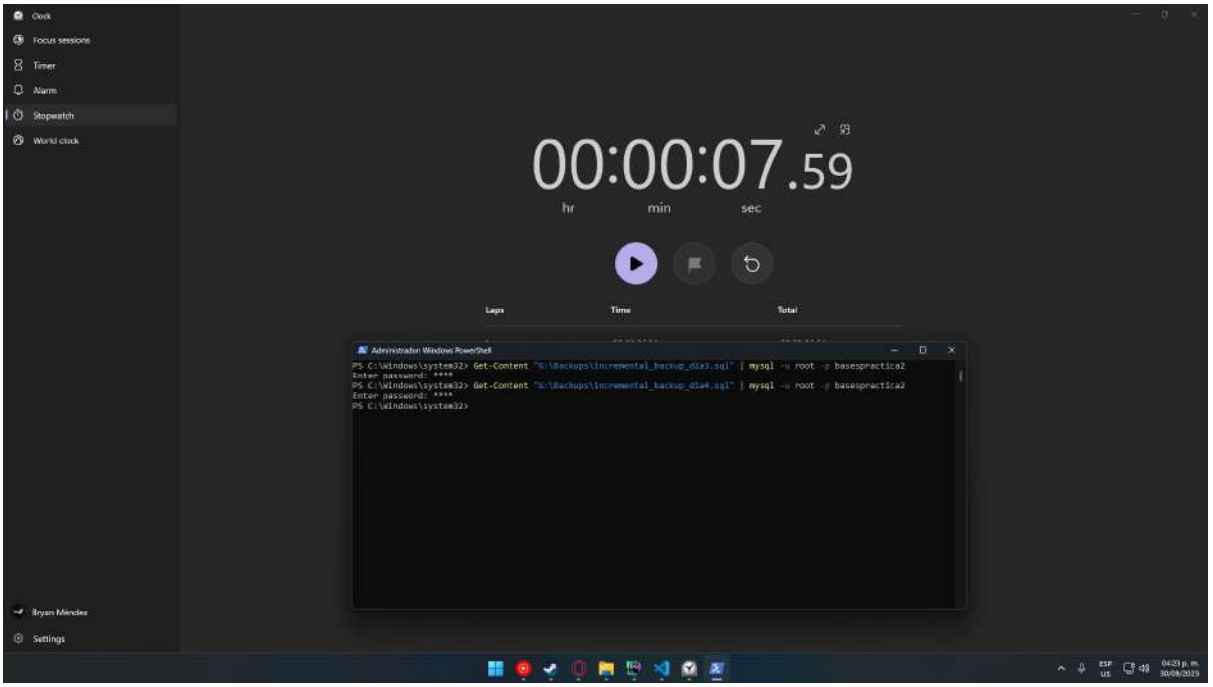
SELECT * FROM log_habitacion



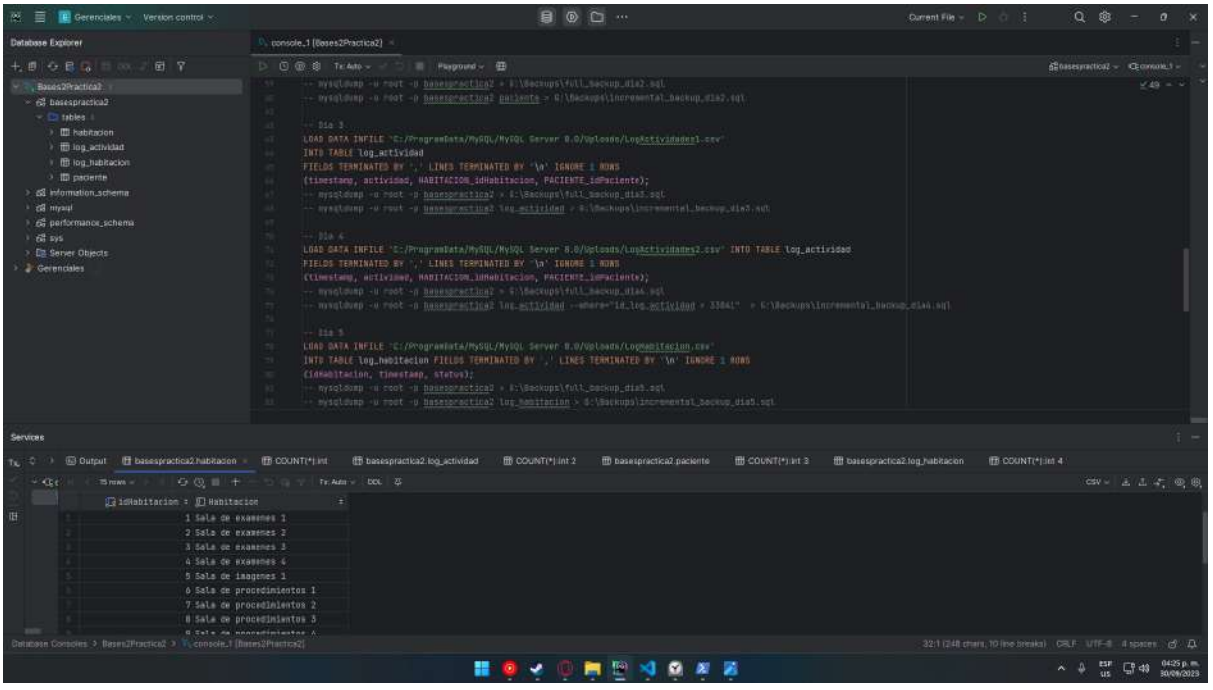
SELECT COUNT(*) FROM log_habitacion


Database Explorer
Bases2Practica2
basespractica2
tables
habitacion
log_actividad
log_habitacion
paciente
information_schema
mysql
performance_schema
sys
Server Objects
Gerenciales
console_1 [Bases2Practica2]
CREATE TABLE LOG_ACTIVIDAD (
id_log_actividad INT AUTO_INCREMENT PRIMARY KEY,
PACIENTE_idPaciente INT NOT NULL,
HABITACION_idHabitacion INT NOT NULL,
timestamp VARCHAR(100) NOT NULL,
actividad VARCHAR(500) NOT NULL,
FOREIGN KEY (PACIENTE_idPaciente) REFERENCES PACIENTE (idPaciente),
FOREIGN KEY (HABITACION_idHabitacion) REFERENCES HABITACION(idHabitacion)
);
Select:
SELECT * FROM HABITACION;
SELECT COUNT(*) FROM HABITACION;
SELECT * FROM LOG_ACTIVIDAD;
SELECT COUNT(*) FROM LOG_ACTIVIDAD;
SELECT * FROM PACIENTE;
SELECT COUNT(*) FROM PACIENTE;
SELECT * FROM LOG_HABITACION;
SELECT COUNT(*) FROM LOG_HABITACION;
Services
Output
basespractica2.habitacion
COUNT(*):int
basespractica2.log_actividad
COUNT(*):int 2
basespractica2.paciente
COUNT(*):int 3
basespractica2.log_habitacion
COUNT(*):int 4
COUNT(*)
0

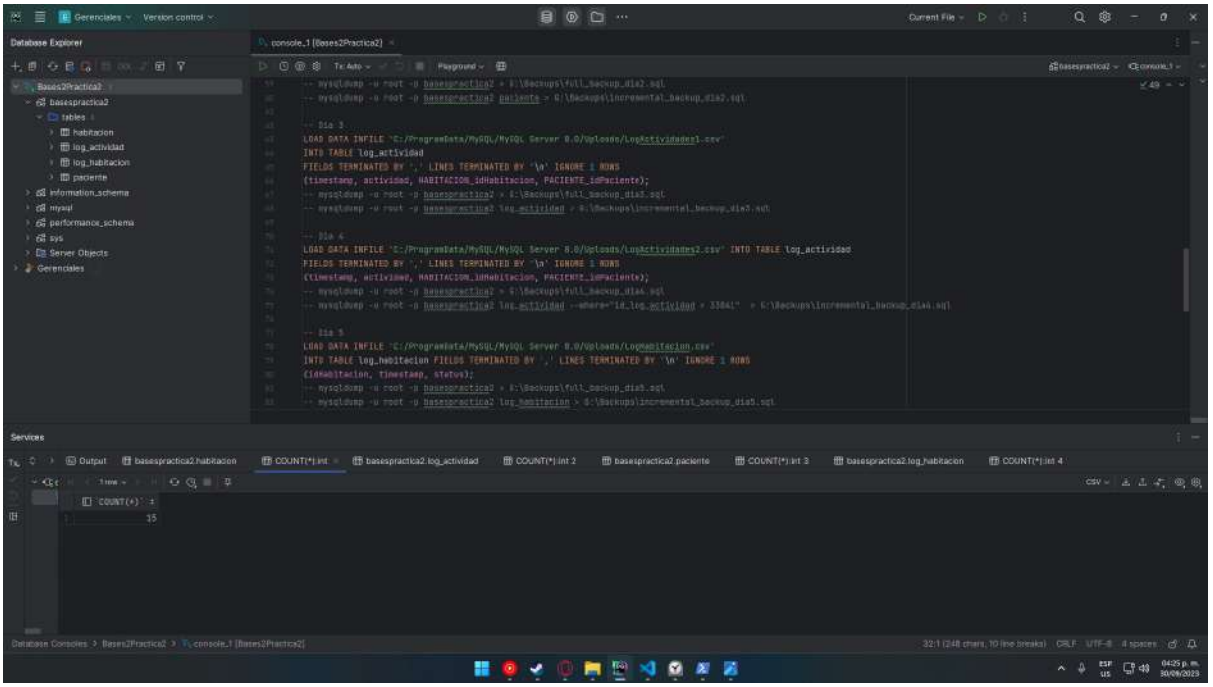
Día 14:
Restauración de backup incremental 4
-- Get-Content "G:\Backups\incremental_backup_dia4.sql" | mysql -u root -p basespractica2



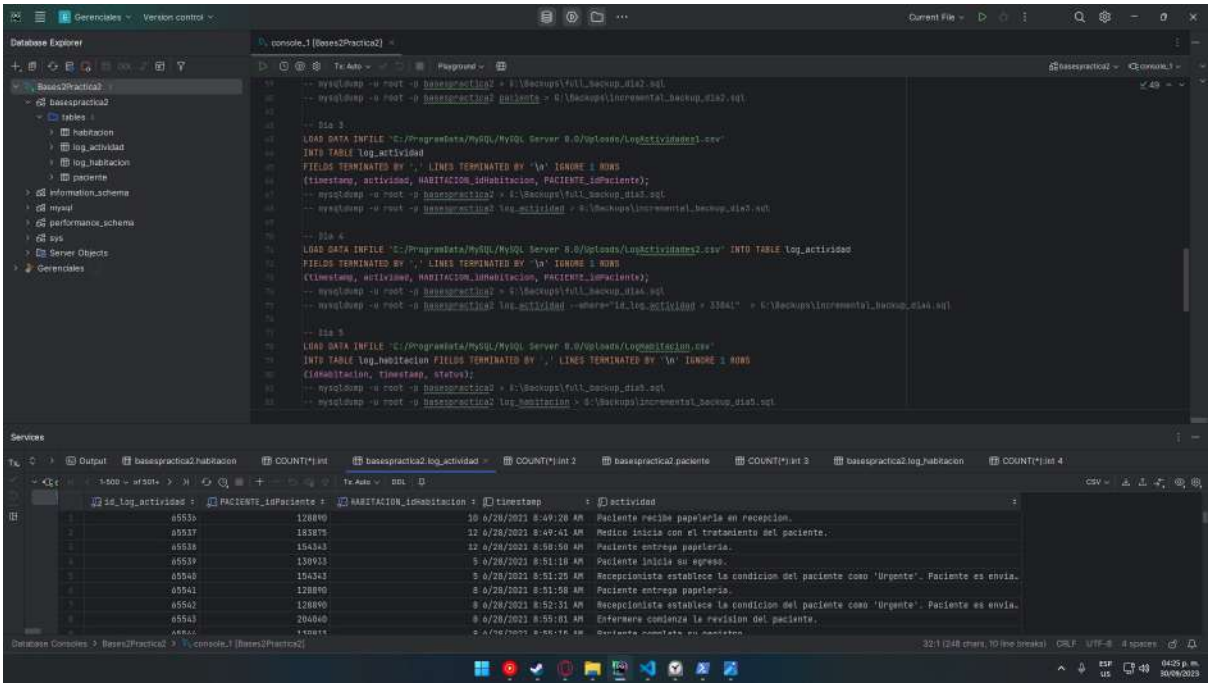
SELECT * FROM habitacion



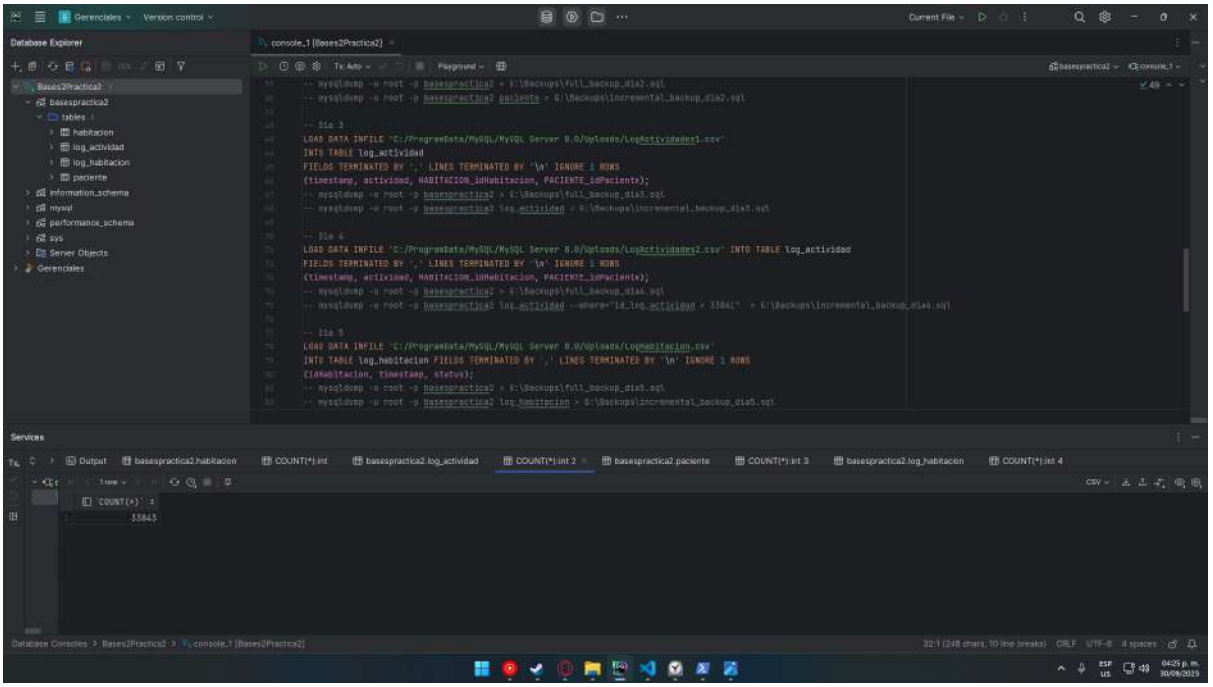
SELECT COUNT(*) FROM habitacion



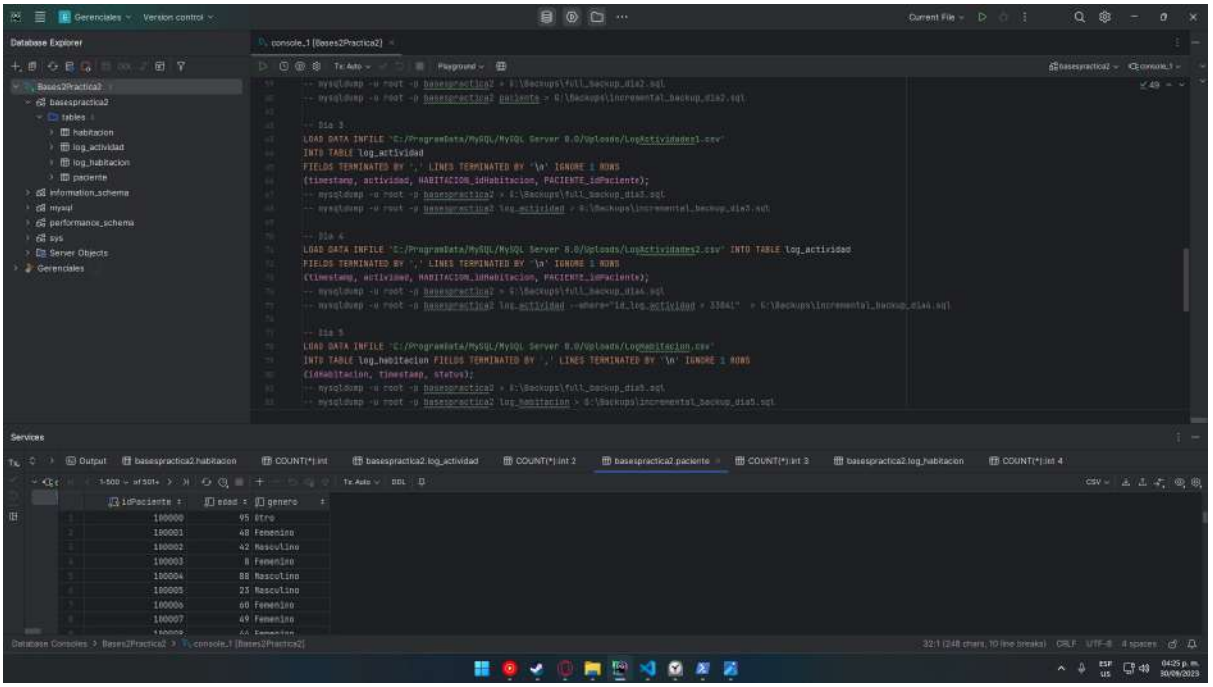
SELECT * FROM log_actividad



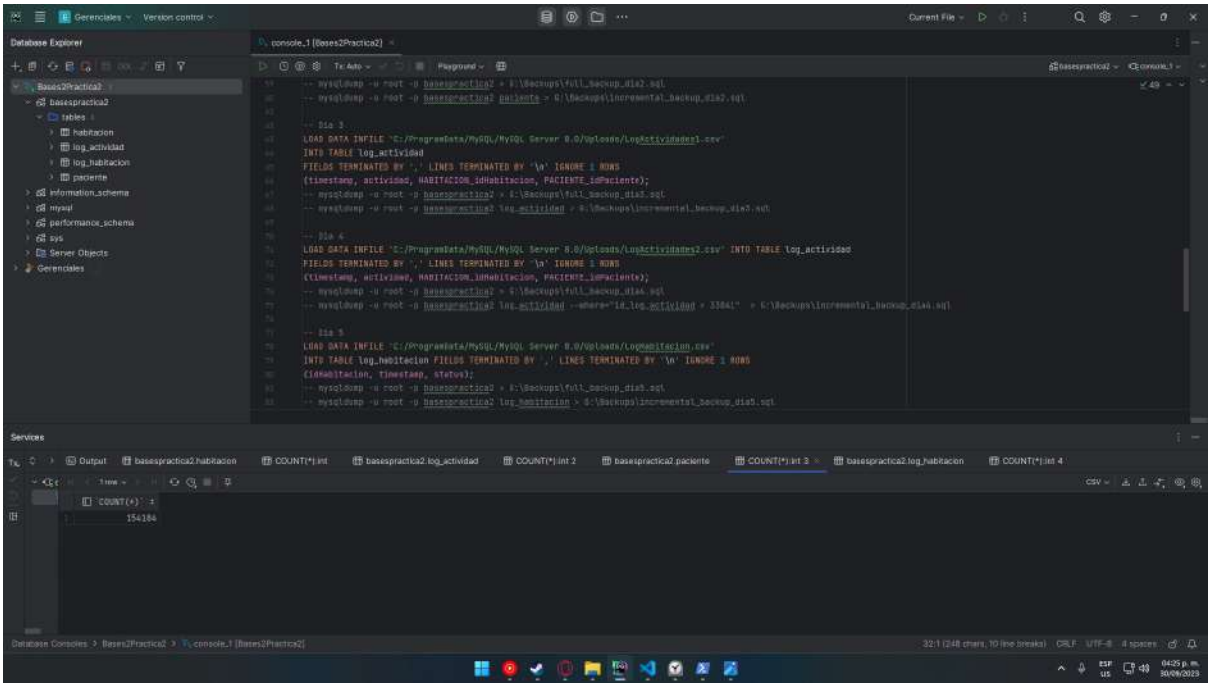
SELECT COUNT(*) FROM log_actividad



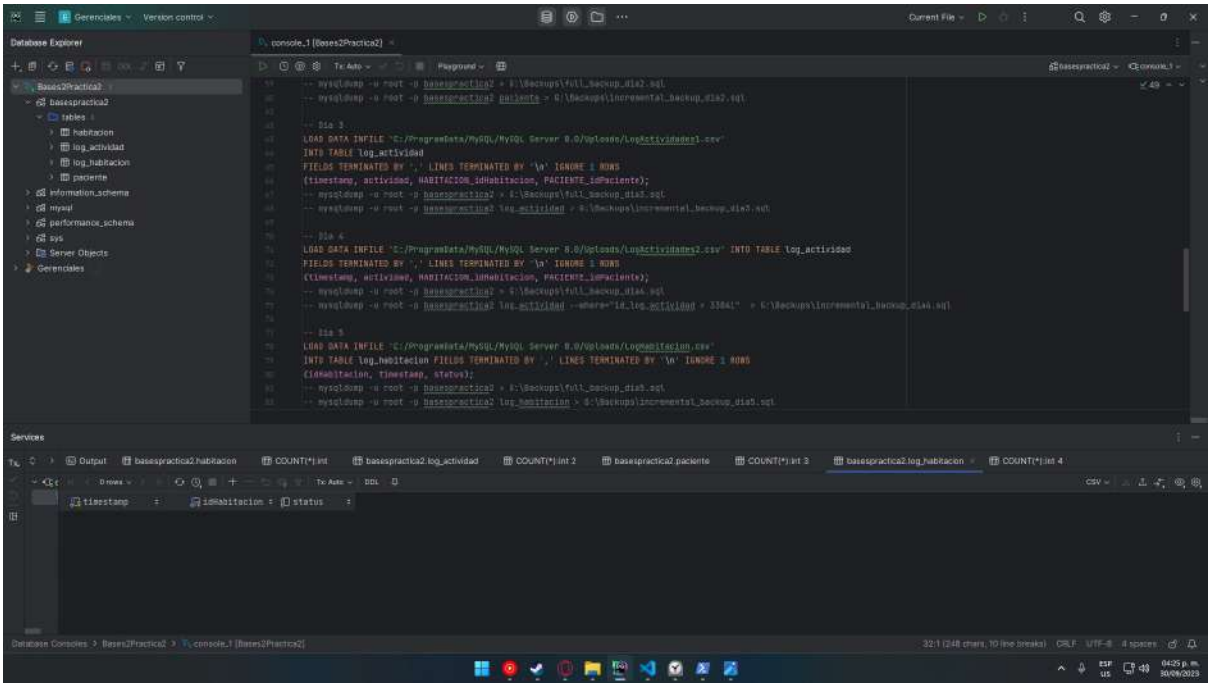
SELECT * FROM paciente



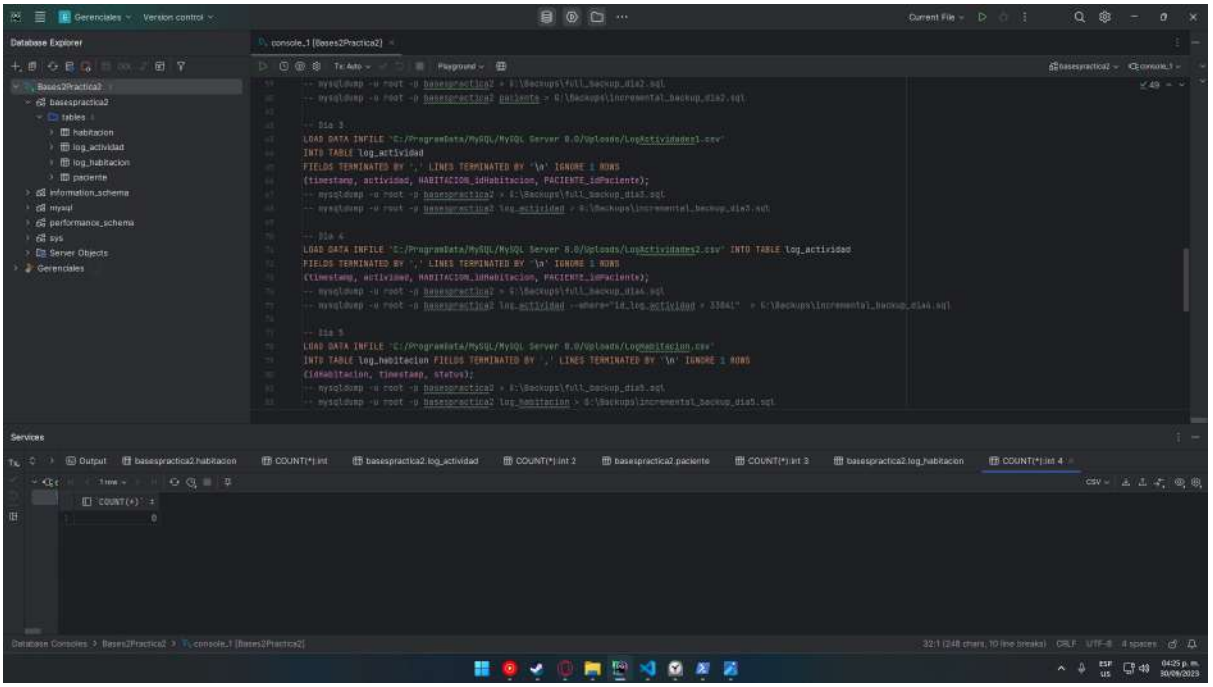
SELECT COUNT(*) FROM paciente



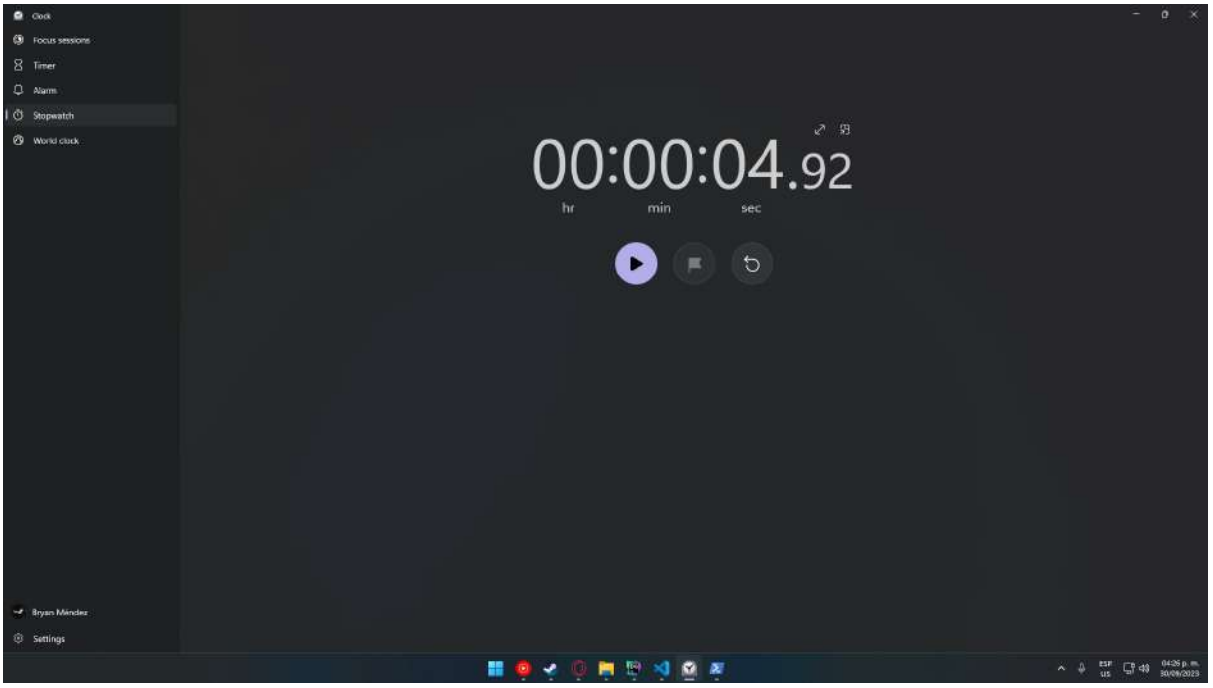
SELECT * FROM log_habitacion



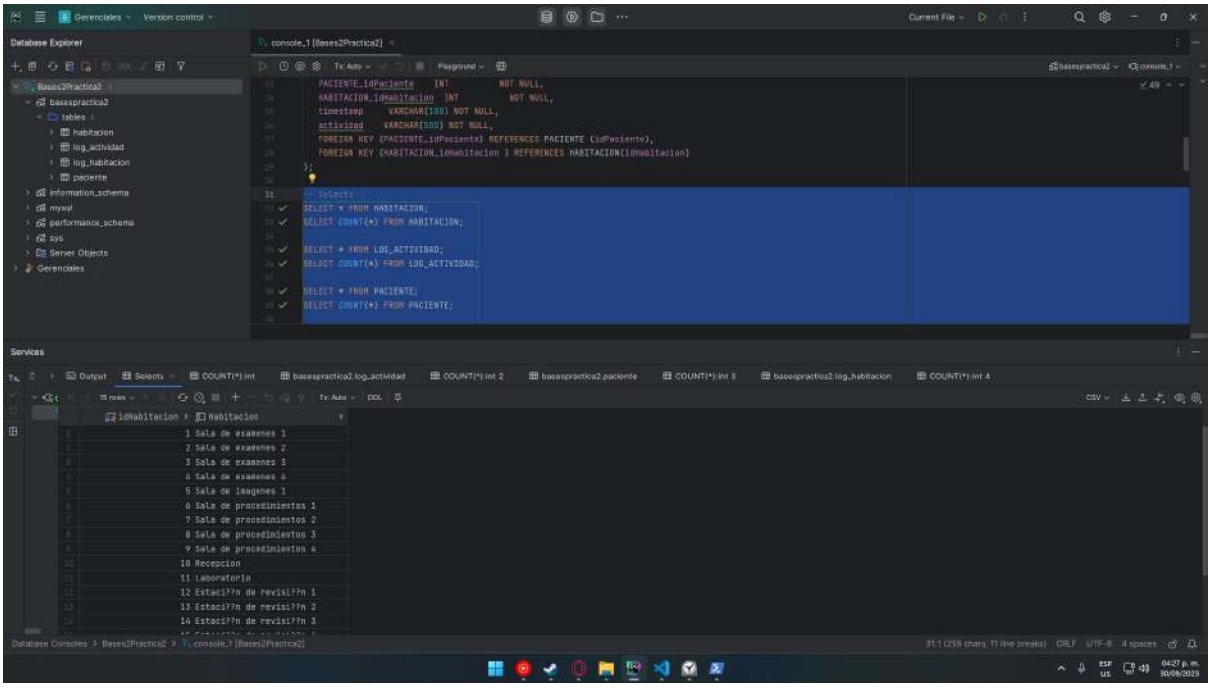
SELECT COUNT(*) FROM log_habitacion


Database Explorer
console_1 [Bases2Practica2]
Bases2Practica2
basespractica2
tables
habitacion
log_actividad
log_habitacion
paciente
information_schema
mysql
performance_schema
sys
Server Objects
Gerenciales
-- mysqldump -u root -p basespractica2 > E:\Backups\full_backup_dia2.sql
-- mysqldump -u root -p basespractica2 pacients > G:\Backups\incremental_backup_dia2.sql
-- Dia 3
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogActividades1.csv'
INTO TABLE log_actividad
FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS
(timestamp, actividad, HABITACION_idHabitacion, PACIENTE_idPaciente);
-- mysqldump -u root -p basespractica2 > E:\Backups\full_backup_dia3.sql
-- mysqldump -u root -p basespractica2 log_actividad > G:\Backups\incremental_backup_dia3.sql
-- Dia 4
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogActividades2.csv' INTO TABLE log_actividad
FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS
(timestamp, actividad, HABITACION_idHabitacion, PACIENTE_idPaciente);
-- mysqldump -u root -p basespractica2 > E:\Backups\full_backup_dia4.sql
-- mysqldump -u root -p basespractica2 log_actividad --where="id_log_actividad > 33841" > E:\Backups\incremental_backup_dia4.sql
-- Dia 5
LOAD DATA INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/LogHabitacion.csv'
INTO TABLE log_habitacion FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' IGNORE 1 ROWS
(idHabitacion, timestamp, status);
-- mysqldump -u root -p basespractica2 > E:\Backups\full_backup_dia5.sql
-- mysqldump -u root -p basespractica2 log_habitacion > G:\Backups\incremental_backup_dia5.sql
Services
Output
basespractica2.habitacion
COUNT(*) int
basespractica2.log_actividad
COUNT(*) int 2
basespractica2.paciente
COUNT(*) int 3
basespractica2.log_habitacion
COUNT(*) int 4
COUNT(*)
0

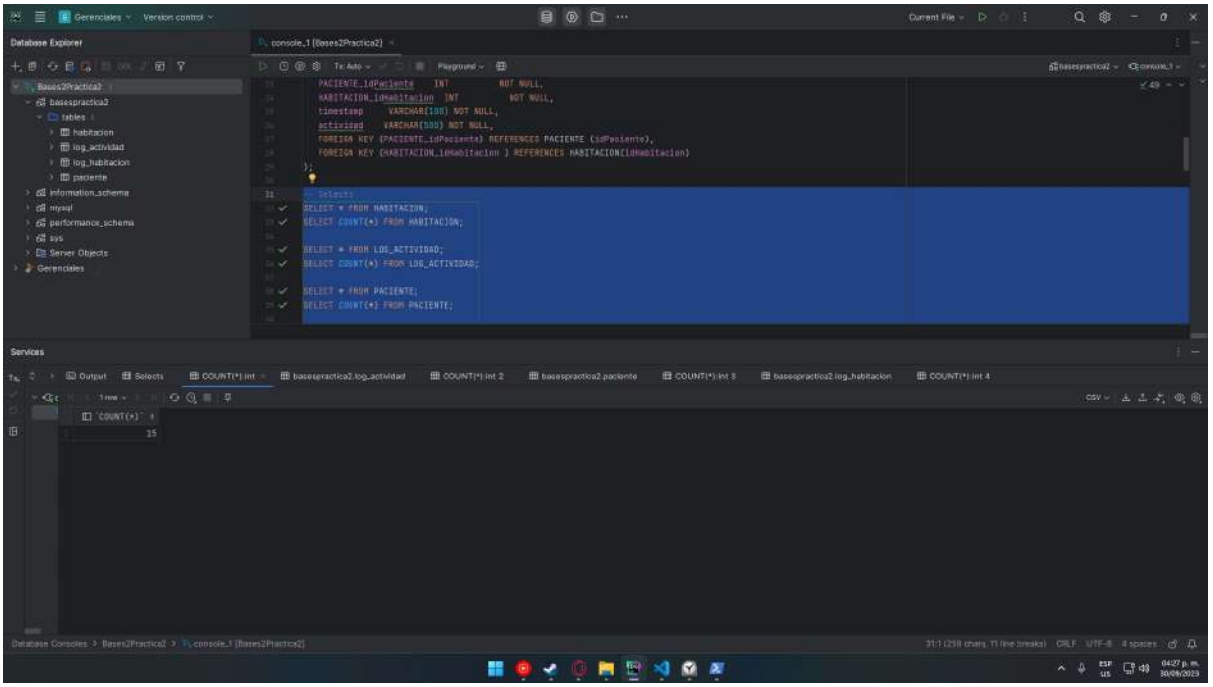
Día 15:
Restauración de backup incremental 5
-- Get-Content "G:\Backups\incremental_backup_dia5.sql" | mysql -u root -p basespractica2



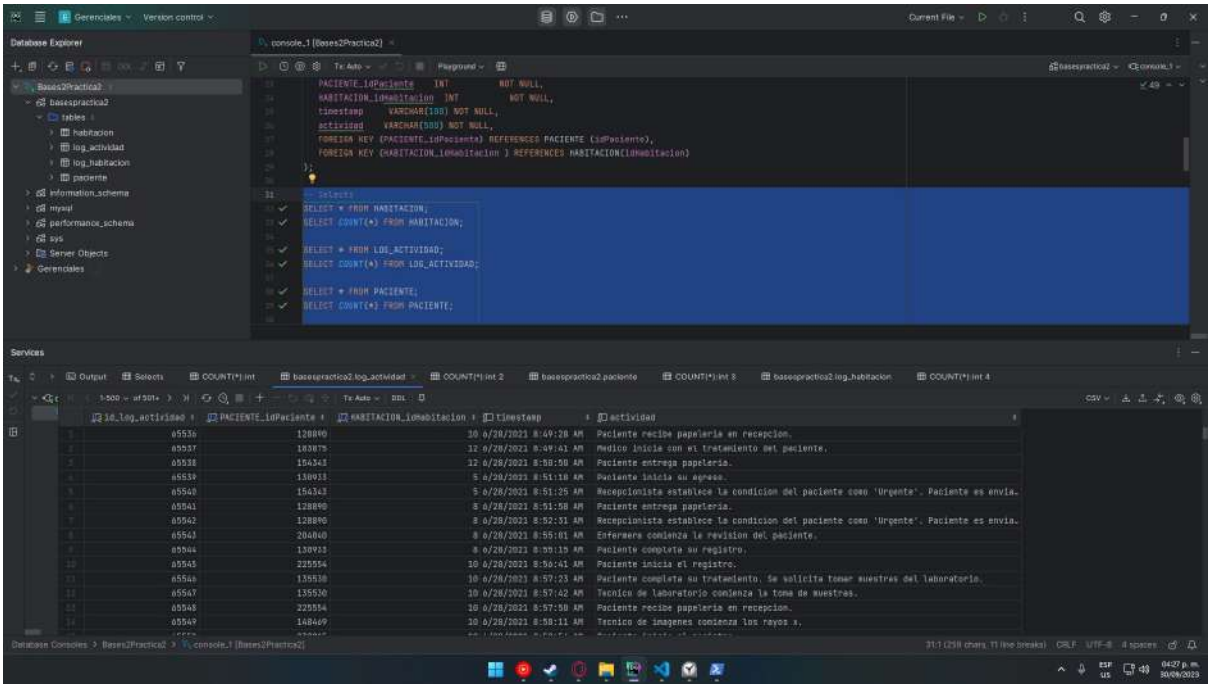
SELECT * FROM habitacion



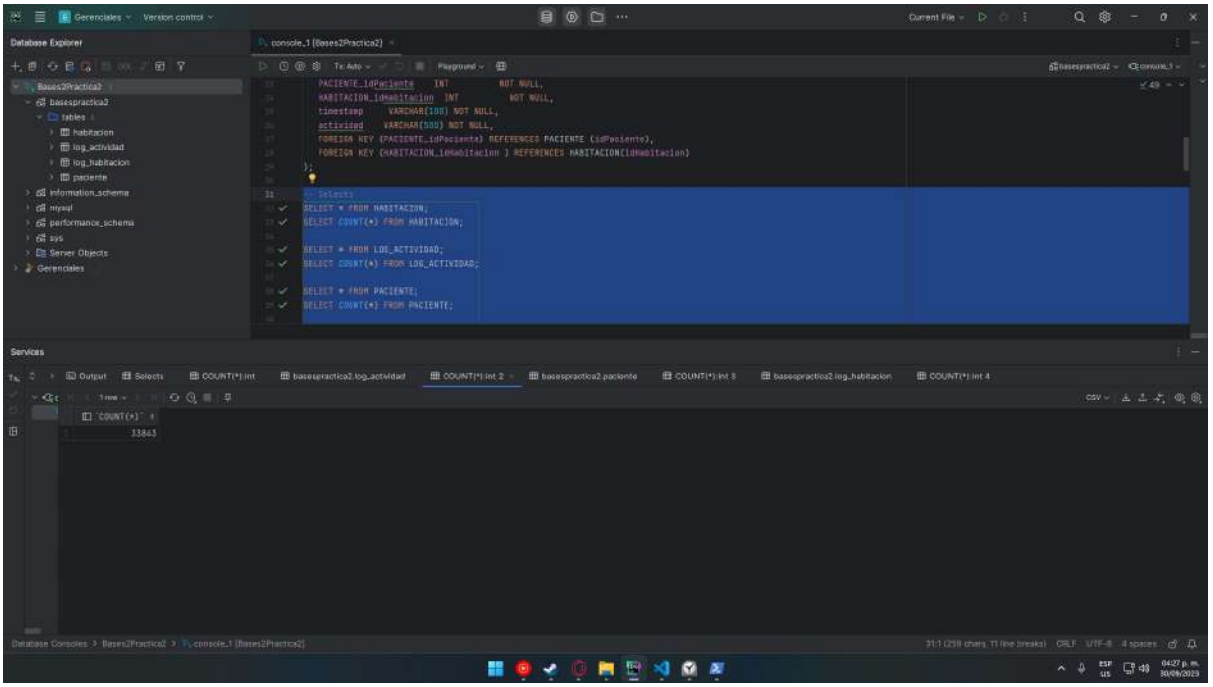
SELECT COUNT(*) FROM habitacion



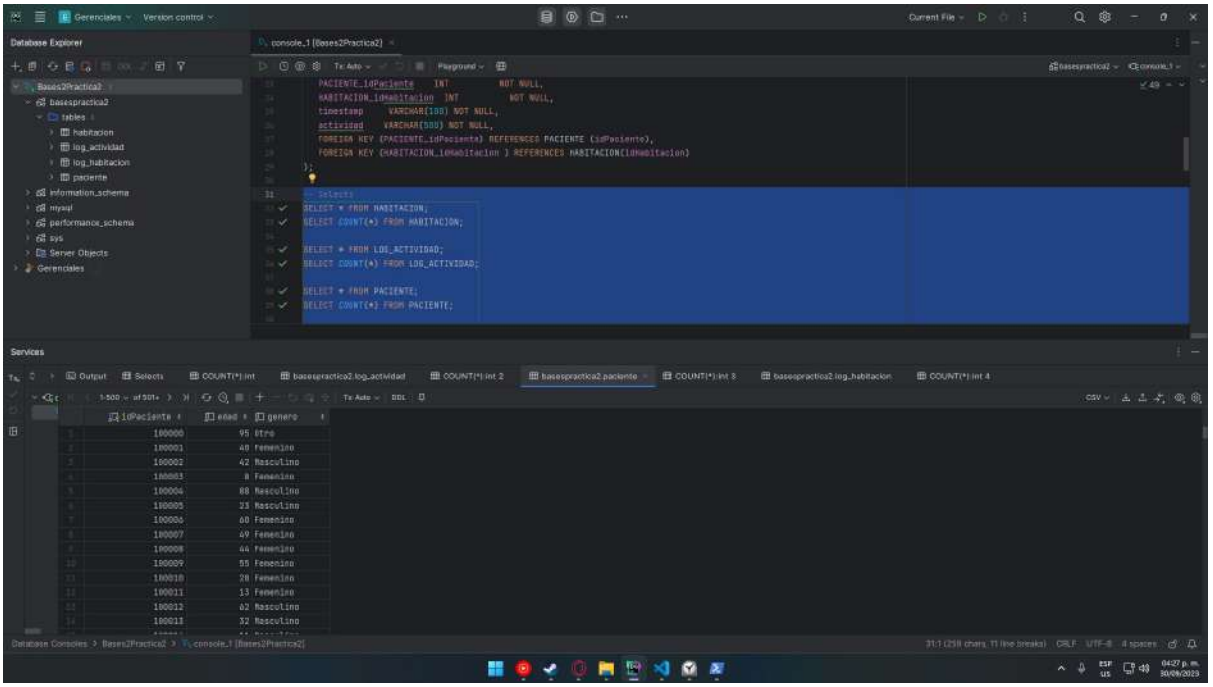
SELECT * FROM log_actividad



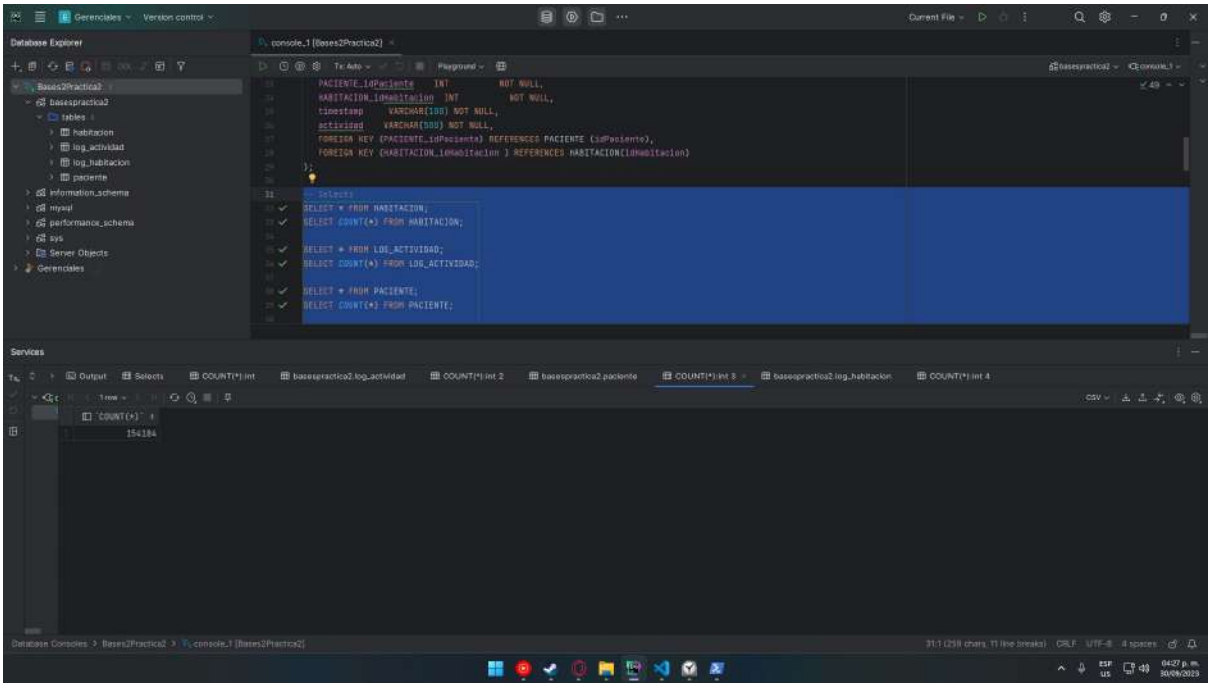
SELECT COUNT(*) FROM log_actividad



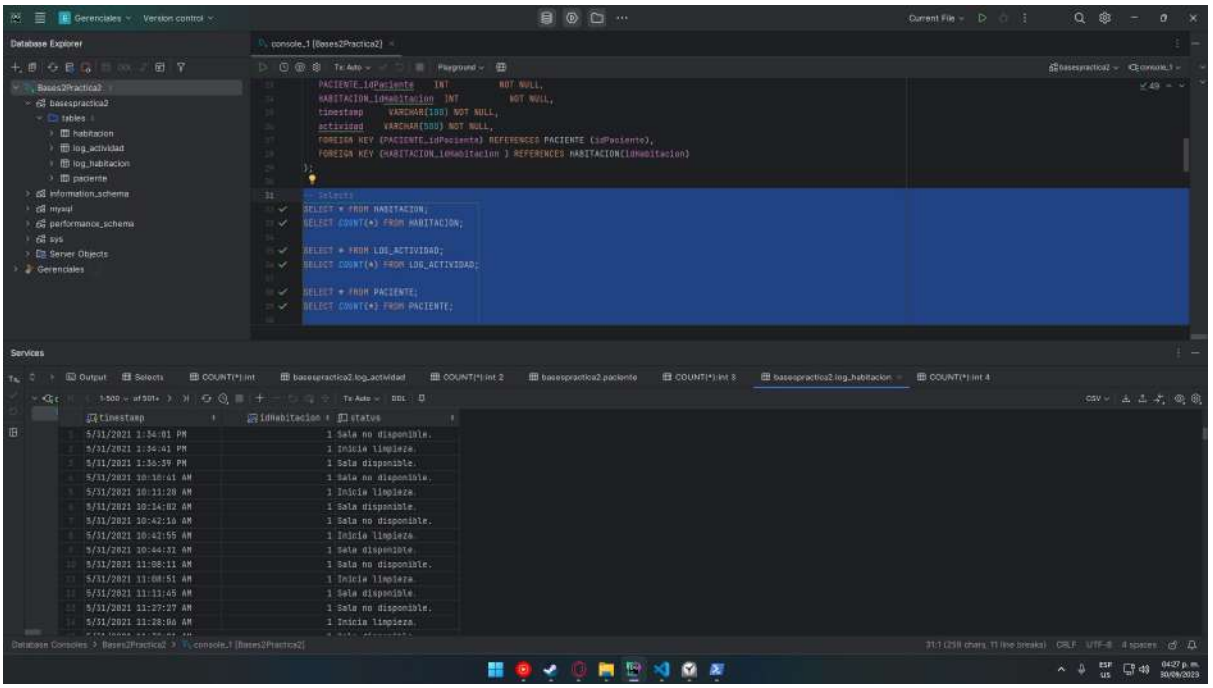
SELECT * FROM paciente



SELECT COUNT(*) FROM paciente



SELECT * FROM log_habitacion



SELECT COUNT(*) FROM log_habitacion