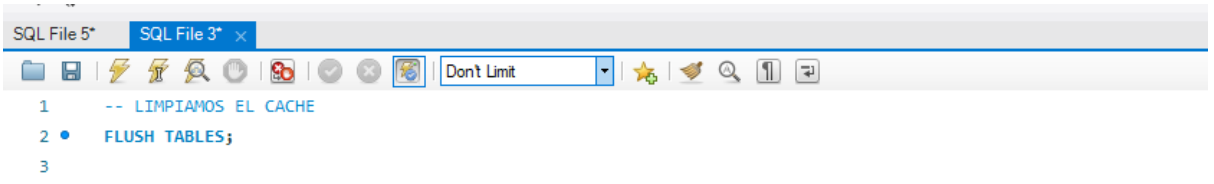
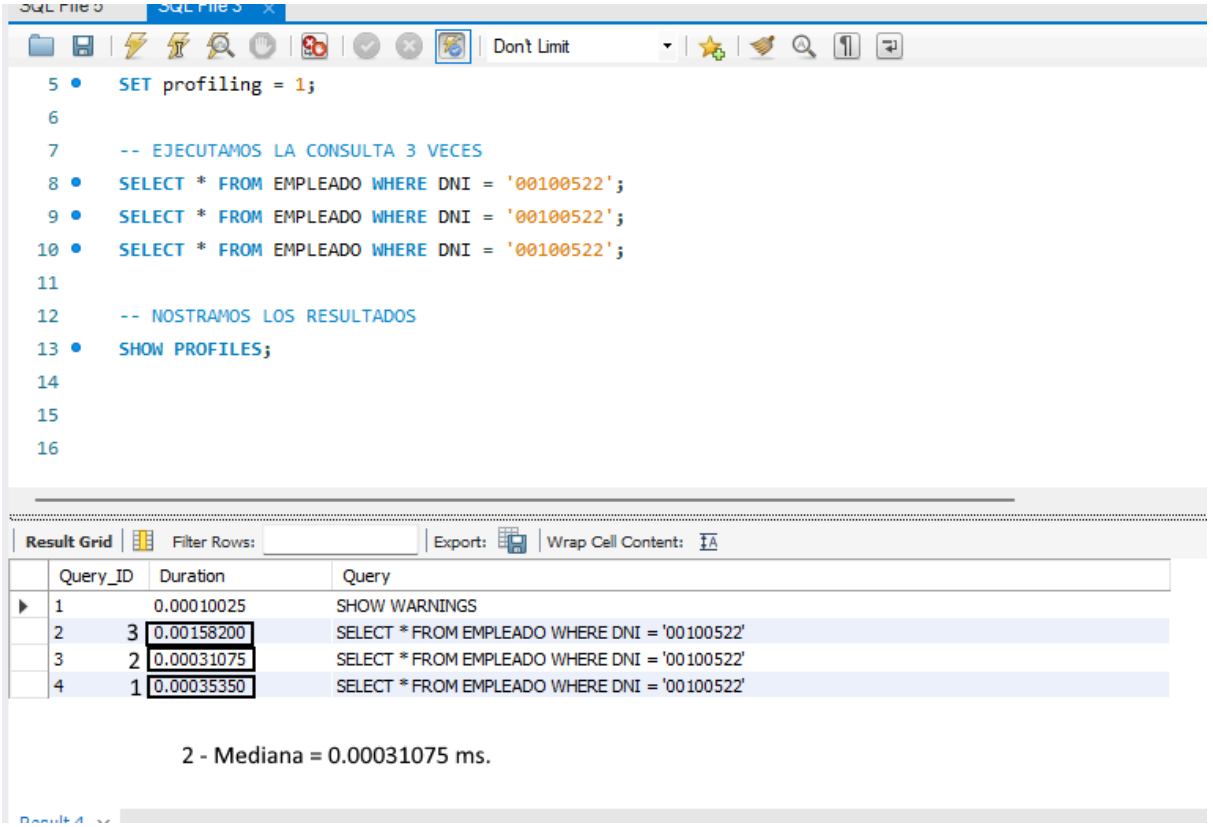
Medición comparativa con/sin índice en 3 consultas (igualdad, rango, JOIN)
ANEXO CAPTURAS DE PANTALLA

A continuación se deja un anexo con las capturas de pantalla de la medición comparativa con y sin índice.

En el primer paso limpiamos el caché de la base.



Continuamos con las consultas sin índices. (Entre cada consulta se vació el caché)
SELECT * con WHERE de la tabla EMPLEADO



2 - Mediana = 0.00031075 ms.

SELECT * CON BETWEEN

SQL File 5* | SQL File 3*

Don't Limit

```
7   -- SELECT * FROM EMPLEADO WHERE DNI = '00100522';
8   -- SELECT * FROM EMPLEADO WHERE DNI = '00100522';
9   -- SELECT * FROM EMPLEADO WHERE DNI = '00100522';
10  SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND  439000;
11  SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND  439000;
12  SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND  439000;
13
14  -- NOSTRAMOS LOS RESULTADOS
15  SHOW PROFILES;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Query_ID	Duration	Query
▶	1	0.00007775	SHOW WARNINGS
	2	3 0.43752800	SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND 439000
	3	2 0.38016600	SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND 439000
	4	1 0.34302775	SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND 439000

2 - Mediana = 0.39016600 ms.

SELECT * CON JOIN

SQL File 5* | SQL File 3*

Don't Limit

```
13
14  SELECT * FROM empleado e
15  INNER JOIN legajo l on l.id = e.legajo
16  WHERE l.estado = 'INACTIVO';
17
18  SELECT * FROM empleado e
19  INNER JOIN legajo l on l.id = e.legajo
20  WHERE l.estado = 'INACTIVO';
21
22  SELECT * FROM empleado e
23  INNER JOIN legajo l on l.id = e.legajo
24  WHERE l.estado = 'INACTIVO';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Query_ID	Duration	Query
▶	1	0.00009775	SHOW WARNINGS
	2	1 1.89024425	SELECT * FROM empleado e INNER JOIN legajo l on l.id = e.legajo WHERE l.estado = 'INACTIVO'
	3	3 2.28642550	SELECT * FROM empleado e INNER JOIN legajo l on l.id = e.legajo WHERE l.estado = 'INACTIVO'
	4	2 1.97405675	SELECT * FROM empleado e INNER JOIN legajo l on l.id = e.legajo WHERE l.estado = 'INACTIVO'

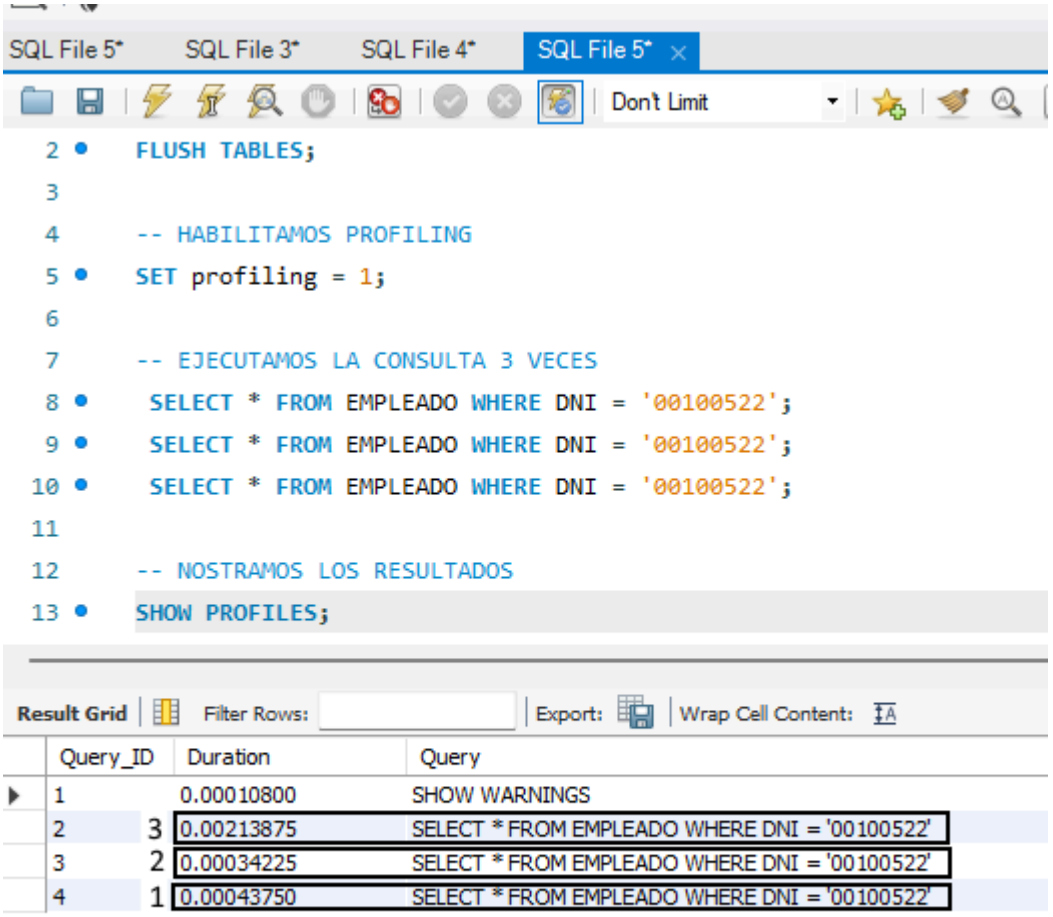
2 - Mediana = 1.97405675 ms.

Result 4

Luego agregamos los índices a los registros correspondientes.

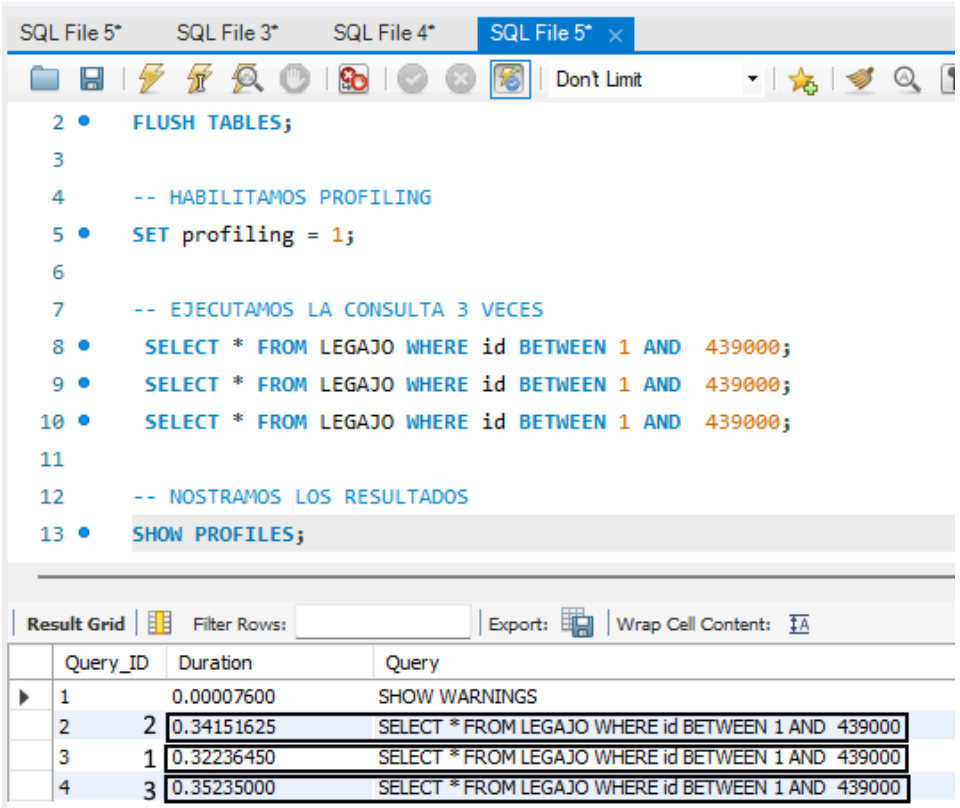
```sql
-- CREAMOS INDICE EMPLEADO
CREATE INDEX idx_empleado_dni ON Empleado(dni);

-- CREAMOS INDICE LEGAJO
CREATE INDEX idx_legajo_id  ON legajo(id);

-- CREAMOS INDICE EMPLEADO LEGAJO
CREATE INDEX idx_empleado_legajo ON Empleado(legajo);

```

Y continuamos con las consultas con índices.
SELECT * con WHERE



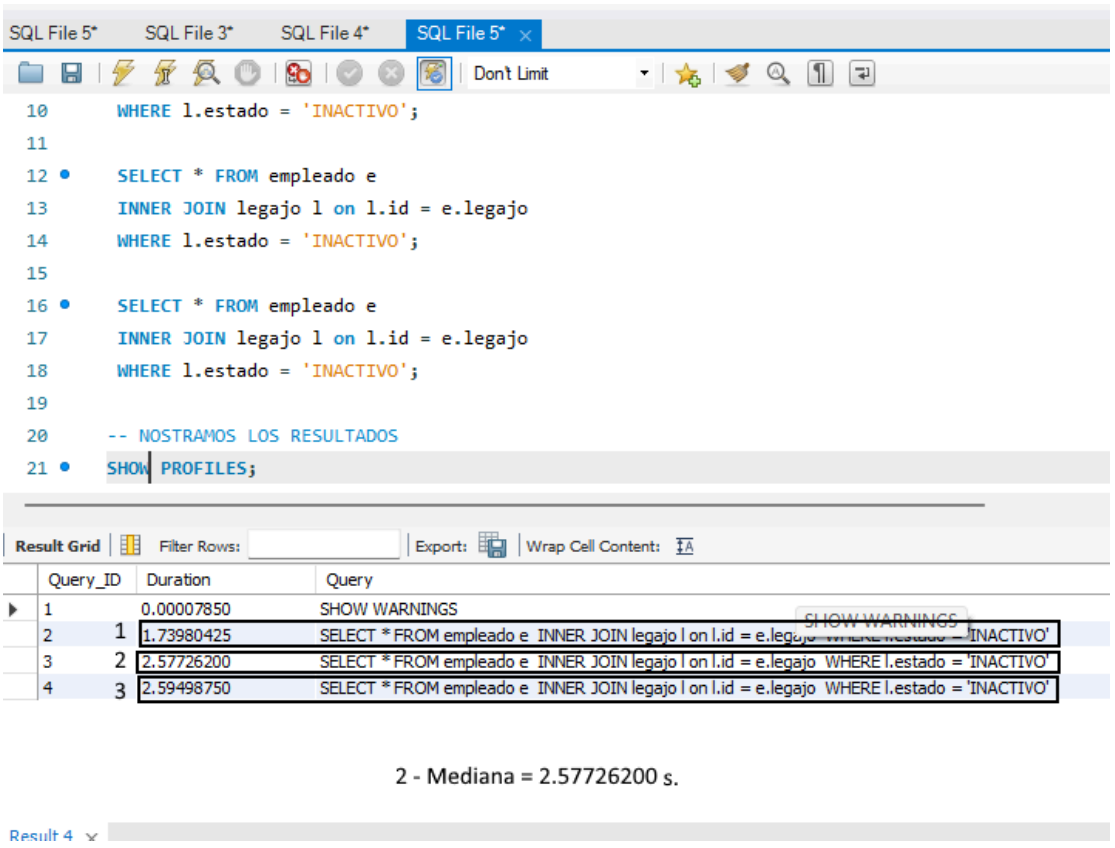
2 - Mediana = 0.00034225 s.

SELECT * CON BETWEEN



2 - Mediana = 0.34151625 s.

SELECT * CON JOIN



2 - Mediana = 2.57726200 s.

EXPLAIN

```sql
-- LIMPIAMOS EL CACHE
FLUSH TABLES;

-- HABILITAMOS PROFILING
SET profiling = 1;

-- EJECUTAMOS EXPLAIN
EXPLAIN
-- ANALYZE
SELECT * FROM EMPLEADO WHERE DNI = '00100522';


-- SELECT * FROM LEGAJO WHERE id BETWEEN 1 AND  439000;


-- SELECT * FROM empleado e
-- INNER JOIN legajo l on l.id = e.legajo
-- WHERE l.estado = 'INACTIVO';


-- NOSTRAMOS LOS RESULTADOS
SHOW PROFILES;
```

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	EMPLEADO	NULL	const	dni,idx_empleado_dni	dni	62	const	1	100.00	NULL

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	LEGAJO	NULL	range	PRIMARY,idx_legajo_id	PRIMARY	8	NULL	234619	100.00	Using where

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	l	NULL	ALL	PRIMARY,idx_legajo_id	NULL	NULL	NULL	469239	50.00	Using where
1	SIMPLE	e	NULL	eq_ref	legajo,idx_empleado_legajo	legajo	9	tpfi_ddbb.l.id	1	100.00	NULL