



UNCA

Praeteritum Nescere Posterum Molier

BASE DE DATOS II

Concurrencia

Ejercicio 3

Ejecute concurrentemente las transacciones en Mysql y describa lo que sucede con las transacciones y la tabla con la que se trabaja.

```
mysql> set autocommit=0;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from bank where id=32 lock in share mode;
+----+-----+
| id | debit |
+----+-----+
| 32 | 666 |
+----+-----+
1 row in set (0.00 sec)
mysql> update bank set debit=888 where id=32;
ERROR 1213 (40001): Deadlock found when trying to get
lock;
Try restarting transaction
```

>T1 tiene bloqueado a 32, T2 espera la liberacion

```
mysql> set autocommit=0;
Query OK, 0 rows affected (0.00 sec)
mysql> update bank set debit=777 where id=32;
.
.
.
>Wait unlock
.
.
.
.
```

>al hacer el update en T1 ahora T1 espera a T2
>por lo tanto se produce un deadlock
>el dbms hace rollback en T1 (ultimo en espera) y procesa T2

```
mysql> select * from bank;
+----+-----+
| id | debit |
+----+-----+
| 32 | 666 |
| 66 | 3453 |
+----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select * from bank;
+----+-----+
| id | debit |
+----+-----+
| 32 | 666 |
| 66 | 3453 |
+----+-----+
2 rows in set (0.00 sec)
mysql> rollback;
```

```
. .
.
mysql> update bank set debit=777 where id=32;
Query OK, 1 row affected (23.10 sec)
Rows matched: 1 Changed: 1 Warnings:
0
```

```
mysql> select * from bank;
+----+-----+
| id | debit |
+----+-----+
| 32 | 777 |
| 66 | 3453 |
+----+-----+
2 rows in set (0.00 sec)
```

```
mysql> commit;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from bank;
+----+-----+
| id | debit |
+----+-----+
| 32 | 777 |
| 66 | 3453 |
+----+-----+
2 rows in set (0.00 sec)
```

```
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from bank;
```

id	debit
32	777
66	3453

```
2 rows in set (0.01 sec)
```