

Interactive - 27 - 1 to 0 or 1 relationship (fk, unique)

Now that we have our tables let's look at the relationship between "t_ymux_user" and ct_login. This is our 1 to 0 or 1 relationship.

It is provided by the primary key on ct_login being required but not having a default value where a key is generated. This is combined with the foreign key constraint to "t_ymux_user".

Try an insert to see if you can fake it out (the insert will fail).

```
insert into ct_login ( user_id, pg_acct ) values ( uuid_generate_v4(), 'x' );
```

You should get an error. The error indicates that you violated a foreign key and will look similar to:

If you ran it in psql or pgAdmin your error would look like:

```
ERROR: insert or update on table "ct_homework_ans" violates foreign key constraint "user_id_fkey"
DETAIL: Key (user_id)=(ce1d8fdd-aa04-4bb4-9ef7-72655ff63b95) is not present in table "ct_login".
CONTEXT: SQL statement "insert into ct_homework_ans (
        user_id,
        homework_id
    ) select
        NEW.user_id,
        t1.homework_id
    from ct_homework as t1
    where not exists (
        select 1 as "found"
        from ct_homework_ans t2
        where t2.user_id = NEW.user_id
        and t2.homework_id = t1.homework_id
    )"
PL/pgSQL function ct_login_ins() line 3 at SQL statement
```

In this tool you get back:

```
{
  "Status": "error",
  "MsgSet": [
    {
      "Msg": "pq: insert or update on table \"ct_homework_ans\" violates foreign key constraint \"user_id_fkey\"",
      "Stmt": "insert into ct_login ( user_id, pg_acct ) values ( uuid_generate_v4(), 'x' );"
    }
  ]
}
```

Tags: 1:0, “1 to 0”, “1:0 relationship”, “1:1”

Validate: SQL-Select, “select ‘PASS’ as x”