Simuler l’impact des types de données

ÉTAPE 1 — CRÉATION DES TABLES

Version MAL typée (tout en TEXT) :

```
CREATE TABLE orders_text (
    id TEXT,
    user_id TEXT,
    status TEXT,
    total_amount TEXT,
    created_at TEXT
);
```

Version BIEN typée :

```
CREATE TABLE orders_typed (
    id UUID,
    user_id UUID,
    status INT,
    total_amount INT,
    created_at TIMESTAMP
);
```

ÉTAPE 2 — Chargement de 1 000 000 lignes dans chaque

orders_text

```
INSERT INTO orders_text
SELECT
    gen_random_uuid()::text,
    gen_random_uuid()::text,
    (ARRAY['pending','paid','shipped','cancelled'])[1 + (random()*4)::int],
    (random()*500)::int::text,
    (NOW() - (random() * interval '1000 days'))::text
FROM generate_series(1, 1000000);
```

orders_typed

```
INSERT INTO orders_typed
SELECT
   gen_random_uuid(),
   gen_random_uuid(),
   (ARRAY[0,1,2,3])[1 + (random()*4)::int],
   (random()*500)::int,
   NOW() - (random() * interval '1000 days')
FROM generate_series(1, 1000000);
```

ÉTAPE 3 — Comparer la taille disque

Taille disque

```
SELECT 'orders_text' AS table,
     pg_size_pretty(pg_total_relation_size('orders_text'))
UNION ALL
SELECT 'orders_typed',
     pg_size_pretty(pg_total_relation_size('orders_typed'));
```