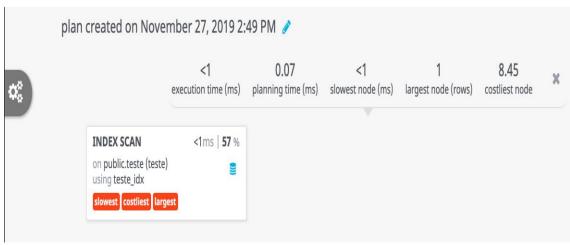
```
ime: 368,277 ms
icha6a=> explain select*from teste where id=3456;
                                                                     QUERY PLAN
Gather (cost=1000.00..49165.77 rows=1 width=40)
                  Filter: (id = 3456)
4 rows)
ime: 10,008 ms
icha6a=> explain analyze select * from teste where id=3456;
-> Parallel Seq Scan on teste (cost=0.00..48165.67 rows=1 width=40) (actual time=99.389. 187.609 rows=0 loops=3)
Filter: (id = 3456)
             Rows Removed by Filter: 1666666
 icha6a=> explain (format json) select * from teste where id=3456;
QUERY PLAN
    "Plan": {
  "Node Type": "Gather",
  "Parallel Aware": false,
  "Startup Cost": 1000.00,
  "Total Cost": 49165.77,
  "Plan Rows": 1,
  "Plan Width": 40,
  "Workers Planned": 2,
  "Single Copy": false,
  "Plans": [
  {
              "Node Type": "Seq Scan", +
"Parent Relationship": "Outer",+
              "Parent Relationship": "Ot
"Parallel Aware": true,
"Relation Name": "teste",
"Alias": "teste",
"Startup Cost": 0.00,
"Total Cost": 48165.67,
"Plan Rows": 1,
"Plan Width": 40,
"Filter": "(id = 3456)"
```

```
QUERY PLAN
"Plan": {
    "Node Type": "Gather",
   "Parallel Aware": false,
"Startup Cost": 1000.00,
"Total Cost": 49165.77,
"Plan Rows": 1,
"Plan Width": 40,
   "Actual Loops": 1,
"Output": ["id", "c1", "c2"],
    "Workers Planned": 2,
    "Shared Hit Blocks": 16055,
"Shared Read Blocks": 6069,
    "Local Hit Blocks": 0,
"Local Read Blocks": 0,
    "Local Written Blocks": 0,
           "Parallel Aware": true,
"Relation Name": "teste",
           "Schema": "public",
"Alias": "teste",
"Startup Cost": 0.00,
"Total Cost": 48165.67,
            "Actual Startup Time": 97.860,
"Actual Total Time": 171.411,
```



```
icha6a=> SELECT relname, ((relpages*8)/1024) as MB, reltype FROM pg_class WHERE reltype=0
icha6a-> ORDER BY relpages DESC LIMIT 30;
pg depend reference index
pg_depend_depender_index
pg_proc_proname_args_nsp_index
pg_description_o_c_o_index
pg_attribute_relid_attnam_index
pg attribute relid attnum index
pg_proc_oid_index
pg_class_relname_nsp_index
pg_operator_oprname_l_r_n_index
pg_collation_name_enc_nsp_index
pg type typname nsp index
pg_operator_oid_index
pg_amop_opr_fam_index
pg_amop_fam_strat_index
pg ts config map index
pg_collation_oid_index
pg_amproc_oid_index
pg_amproc_fam_proc_index
pg_amop_oid_index
pg class oid index
pg_aggregate_fnoid_index
pg_constraint oid index
pg_authid_rolname_index
pg authid oid index
pg_auth_members_role_member_index
pg_auth_members_member_role_index
```

```
ficha6a=> drop table teste;

DROP TABLE

ficha6a=> create table teste (id int not null, c1 int, c2 text);

CREATE TABLE

ficha6a=> CREATE FUNCTION random_string(minlen NUMERIC, maxlen NUMERIC)RETURNS

ficha6a-> VARCHAR(1000)

ficha6a-> $$

ficha6a-> $$

ficha6a$> DECLARE

ficha6a$> DECLARE

ficha6a$> in INTEGER := 0;

ficha6a$> len INTEGER := 0;

ficha6a$> len INTEGER := 0;

ficha6a$> RETURN rv;

ficha6a$> END IF;

ficha6a$> END IF;

ficha6a$> FOR i IN 1..floor(len) LOOP

ficha6a$> rv := rv || chr(97+CAST(random() * 25 AS INTEGER));

ficha6a$> RETURN rv;

ficha6a$> RETURN rv;

ficha6a$> RETURN rv;

ficha6a$> SHO LOOP;

ficha6a$> SHO LOOP;

ficha6a$> SHO LOOP;

ficha6a$> RETURN rv;

ficha6a$> RETURN rv;

ficha6a$> RETURN rv;

ficha6a$> RETURN rv;

ficha6a$> SHO LOOP;

ficha6a$> RETURN rv;

ficha6a$> RETU
```

```
Seq Scan on teste (cost=0.00..77028.00 rows=5000000 width=13)
icha6a=> explain select*from teste where id>2500000;
                                   OUERY PLAN
icha6a=> explain select*from teste where id>2750000;
```

lower() -> converte todos os carateres da coluna c2 para minúsculas

```
ficha6a=> explain analyze select*from teste where c2 = 'a%';

QUERY PLAN

Gather (cost=1000.00..54073.87 rows=42 width=13) (actual time=358.719..401.301 rows=0 loops=1)

Workers Planned: 2

Workers Launched: 2

-> Parallel Seq Scan on teste (cost=0.00..53069.67 rows=18 width=13) (actual time=276.036..276.036 rows=0 loops=3)

Filter: (c2 = 'a%'::text)

Rows Removed by Filter: 1666667

Planning Time: 0.120 ms

Execution Time: 401.329 ms
(8 rows)
```

```
ficha6a=> create unique index teste_c1_idx on teste (c1);
ERROR: could not create unique index "teste_c1_idx"
DETAIL: Key (c1)=(39467) is duplicated.
ficha6a=>
```

```
ficha6a=> update teste set c1=33 where id=22;
UPDATE 1
ficha6a=> update teste set c1=33 where id=23;
UPDATE 1
```