

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS temp_tags AS
SELECT * FROM tags;
```

SELECT 3

***** QUERY *****

```
SELECT * FROM temp_tags;
```

pk	tag	parent
1	fruits	NULL
2	vegetables	NULL
4	apple	1

(3 rows)

***** QUERY *****

```
UPDATE temp_tags
SET tag = 'orange'
WHERE pk = 4;
```

UPDATE 1

***** QUERY *****

```
SELECT * FROM temp_tags;
```

pk	tag	parent
1	fruits	NULL
2	vegetables	NULL
4	orange	1

(3 rows)

***** QUERY *****

```
SELECT * FROM temp_tags;
```

pk	tag	parent
1	fruits	NULL
2	vegetables	NULL
4	orange	1

(3 rows)

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS a_tags (
    pk integer NOT NULL PRIMARY KEY,
    tag text,
    parent integer);
```

CREATE TABLE

Table "pg_temp_3.a_tags"				
Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

"a_tags_pkey" PRIMARY KEY, btree (pk)

***** QUERY *****

```
CREATE OR REPLACE RULE r_tags1 AS ON INSERT TO temp_tags
WHERE NEW.tag ILIKE 'a%'
DO ALSO
```

```
    INSERT INTO a_tags (pk, tag, parent)
    VALUES (NEW.pk, NEW.tag, NEW.parent);
```

CREATE RULE

***** QUERY *****

```
INSERT INTO temp_tags (pk, tag)
VALUES (11, 'apple');
```

INSERT 0 1

***** QUERY *****

```
SELECT * FROM temp_tags;
```

pk	tag	parent
1	fruits	NULL
2	vegetables	NULL
4	orange	1
11	apple	NULL

(4 rows)

***** QUERY *****

```
SELECT * FROM a_tags;
```

pk	tag	parent
11	apple	NULL

(1 row)

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS b_tags (
    pk integer NOT NULL PRIMARY KEY,
    tag text,
    parent integer);
```

CREATE TABLE

Table "pg_temp_3.b_tags"				
Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

"b_tags_pkey" PRIMARY KEY, btree (pk)

***** QUERY *****

```
CREATE OR REPLACE RULE r_tags2 AS ON INSERT TO temp_tags
WHERE NEW.tag ILIKE 'b%'
DO INSTEAD
```

```

INSERT INTO b_tags (pk, tag, parent)
VALUES (NEW.pk, NEW.tag, NEW.parent);
*****

```

```

CREATE RULE
***** QUERY *****
INSERT INTO temp_tags (pk, tag)
VALUES (12, 'banana');
*****

```

```

INSERT 0 0
***** QUERY *****
SELECT * FROM temp_tags;
*****

```

pk	tag	parent
1	fruits	NULL
2	vegetables	NULL
4	orange	1
11	apple	NULL

(4 rows)

```

***** QUERY *****
SELECT * FROM b_tags;
*****

```

pk	tag	parent
12	banana	NULL

(1 row)

```

***** QUERY *****
CREATE OR REPLACE RULE r_tags3 AS ON INSERT TO temp_tags
WHERE NEW.tag ILIKE 'c%'
DO INSTEAD NOTHING;
*****

```

```

CREATE RULE
***** QUERY *****
INSERT INTO temp_tags (pk, tag)
VALUES (13, 'cedor');
*****

```

```

INSERT 0 0
***** QUERY *****
SELECT pk, tag, parent, 'tags' AS tablename FROM temp_tags
UNION ALL
SELECT pk, tag, parent, 'a_tags' AS tablename FROM a_tags
UNION ALL
SELECT pk, tag, parent, 'b_tags' AS tablename FROM b_tags
ORDER BY tablename, tag;
*****

```

pk	tag	parent	tablename
11	apple	NULL	a_tags
12	banana	NULL	b_tags
11	apple	NULL	tags
1	fruits	NULL	tags

```

4 | orange | 1 | tags
2 | vegetables | NULL | tags
(6 rows)

```

***** QUERY *****

```
DROP TABLE IF EXISTS new_tags, new_a_tags, new_b_tags;
```

DROP TABLE

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS new_tags AS
```

```
SELECT * FROM tags LIMIT 0;
```

SELECT 0

Column	Type	Collation	Nullable	Default
pk	integer			
tag	text			
parent	integer			

***** QUERY *****

```
ALTER TABLE new_tags
```

```
ALTER COLUMN pk SET NOT NULL;
```

ALTER TABLE

***** QUERY *****

```
ALTER TABLE new_tags
```

```
ADD CONSTRAINT new_tags_pk PRIMARY KEY (pk);
```

ALTER TABLE

Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

```
"new_tags_pk" PRIMARY KEY, btree (pk)
```

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS new_a_tags AS
```

```
SELECT * FROM tags LIMIT 0;
```

SELECT 0

***** QUERY *****

```
ALTER TABLE new_a_tags
```

```
ALTER COLUMN pk SET NOT NULL;
```

ALTER TABLE

***** QUERY *****

```
ALTER TABLE new_a_tags
```

```
ADD CONSTRAINT new_a_tags_pk PRIMARY KEY (pk);
```

ALTER TABLE

Table "pg_temp_3.new_a_tags"				
Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

"new_a_tags_pk" PRIMARY KEY, btree (pk)

***** QUERY *****

```
CREATE TEMP TABLE IF NOT EXISTS new_b_tags AS
SELECT * FROM tags LIMIT 0;
```

SELECT 0

***** QUERY *****

```
ALTER TABLE new_b_tags
ALTER COLUMN pk SET NOT NULL;
```

ALTER TABLE

***** QUERY *****

```
ALTER TABLE new_b_tags
ADD CONSTRAINT new_b_tags_pk PRIMARY KEY (pk);
```

ALTER TABLE

Table "pg_temp_3.new_b_tags"				
Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

"new_b_tags_pk" PRIMARY KEY, btree (pk)

***** QUERY *****

```
DROP RULE IF EXISTS r_insert_a ON new_tags;
```

DROP RULE

***** QUERY *****

```
DROP RULE IF EXISTS r_insert_b ON new_tags;
```

DROP RULE

***** QUERY *****

```
CREATE OR REPLACE RULE r_insert_a AS ON INSERT TO new_tags
WHERE NEW.tag ILIKE 'a%'
DO ALSO
```

```
    INSERT INTO new_a_tags (pk, tag, parent)
    VALUES (NEW.pk, NEW.tag, NEW.parent);
```

CREATE RULE

***** QUERY *****

```
CREATE OR REPLACE RULE r_insert_b AS ON INSERT TO new_tags
WHERE NEW.tag ILIKE 'b%'
DO ALSO
```

```

INSERT INTO new_b_tags (pk, tag, parent)
VALUES (NEW.pk, NEW.tag, NEW.parent);
*****

```

CREATE RULE

Column	Type	Collation	Nullable	Default
pk	integer		not null	
tag	text			
parent	integer			

Indexes:

"new_tags_pk" PRIMARY KEY, btree (pk)

Rules:

```

r_insert_a AS
ON INSERT TO new_tags
WHERE new.tag ~*'a%':text DO INSERT INTO new_a_tags (pk, tag, parent
)
VALUES (new.pk, new.tag, new.parent)
r_insert_b AS
ON INSERT TO new_tags
WHERE new.tag ~*'b%':text DO INSERT INTO new_b_tags (pk, tag, parent
)
VALUES (new.pk, new.tag, new.parent)

```

***** QUERY *****

```

INSERT INTO new_tags
VALUES
(1, 'fruits', NULL),
(2, 'apple', 1),
(3, 'orange', 1),
(4, 'banana', 1);
*****

```

INSERT 0 4

***** QUERY *****

```

SELECT * FROM new_tags;
*****

```

pk	tag	parent
1	fruits	NULL
2	apple	1
3	orange	1
4	banana	1

(4 rows)

***** QUERY *****

```

SELECT * FROM new_a_tags;
*****

```

pk	tag	parent
2	apple	1

(1 row)

***** QUERY *****

```

SELECT * FROM new_b_tags;
*****

```

```

pk | tag | parent
-----+-----+-----
4 | banana | 1
(1 row)

```

***** QUERY *****

```
DROP RULE IF EXISTS r_delete_a ON new_tags;
```

```
DROP RULE
```

***** QUERY *****

```
DROP RULE IF EXISTS r_delete_b ON new_tags;
```

```
DROP RULE
```

***** QUERY *****

```
CREATE OR REPLACE RULE r_delete_a AS ON DELETE TO new_tags
WHERE OLD.tag ILIKE 'a%'
DO ALSO
```

```
DELETE FROM new_a_tags WHERE OLD.pk = pk;
```

```
CREATE RULE
```

***** QUERY *****

```
CREATE OR REPLACE RULE r_delete_b AS ON DELETE TO new_tags
WHERE OLD.tag ILIKE 'b%'
DO ALSO
```

```
DELETE FROM new_b_tags WHERE OLD.pk = pk;
```

```
CREATE RULE
```

```

Table "pg_temp_3.new_tags"
Column | Type | Collation | Nullable | Default
-----+-----+-----+-----+-----
pk      | integer |          | not null |
tag     | text    |          |          |
parent  | integer |          |          |

```

Indexes:

```
"new_tags_pk" PRIMARY KEY, btree (pk)
```

Rules:

```

r_delete_a AS
ON DELETE TO new_tags
WHERE old.tag ~* 'a%':text DO DELETE FROM new_a_tags
WHERE old.pk = new_a_tags.pk
r_delete_b AS
ON DELETE TO new_tags
WHERE old.tag ~* 'b%':text DO DELETE FROM new_b_tags
WHERE old.pk = new_b_tags.pk
r_insert_a AS
ON INSERT TO new_tags
WHERE new.tag ~* 'a%':text DO INSERT INTO new_a_tags (pk, tag, parent
)
VALUES (new.pk, new.tag, new.parent)
r_insert_b AS
ON INSERT TO new_tags
WHERE new.tag ~* 'b%':text DO INSERT INTO new_b_tags (pk, tag, parent
)
VALUES (new.pk, new.tag, new.parent)

```

***** QUERY *****

```
DELETE FROM new_tags WHERE tag = 'apple';
*****
```

```
DELETE 1
***** QUERY *****
DELETE FROM new_tags WHERE tag = 'banana';
*****
```

```
DELETE 1
***** QUERY *****
SELECT * FROM new_tags;
*****
```

pk	tag	parent
1	fruits	NULL
3	orange	1

(2 rows)

```
***** QUERY *****
SELECT * FROM new_a_tags;
*****
```

pk	tag	parent
----	-----	--------

(0 rows)

```
***** QUERY *****
SELECT * FROM new_b_tags;
*****
```

pk	tag	parent
----	-----	--------

(0 rows)

```
***** QUERY *****
DROP FUNCTION IF EXISTS move_record;
*****
```

```
DROP FUNCTION
***** QUERY *****
CREATE OR REPLACE FUNCTION move_record (
    new_pk integer,
    new_tag text,
    new_parent integer,
    old_pk integer,
    old_tag text) RETURNS VOID AS
$$
    BEGIN
        IF left(lower(new_tag), 1) IN ('a', 'b') THEN
            DELETE FROM new_tags WHERE pk = OLD_pk;
            INSERT INTO new_tags VALUES (new_pk, new_tag, new_p
arent);
        END IF;
    END;
$$
LANGUAGE 'plpgsql';
*****
```

```
CREATE FUNCTION
```



```
***** QUERY *****
DROP RULE IF EXISTS r_insert ON new_tags;
*****
```

```
DROP RULE
***** QUERY *****
CREATE OR REPLACE RULE r_insert AS ON UPDATE TO new_tags
DO ALSO
    SELECT move_record(
        NEW.pk,
        NEW.tag,
        NEW.parent,
        OLD.pk,
        OLD.tag);
*****
```

```
CREATE RULE
***** QUERY *****
UPDATE new_tags SET tag = 'apple' WHERE tag = 'orange';
*****
```

```
move_record
-----
```

(1 row)

```
UPDATE 0
***** QUERY *****
SELECT * FROM new_tags;
*****
```

pk	tag	parent
1	fruits	NULL
3	apple	1

(2 rows)

```
***** QUERY *****
SELECT * FROM new_a_tags;
*****
```

pk	tag	parent
3	apple	1

(1 row)

```
***** QUERY *****
SELECT * FROM new_b_tags;
*****
```

pk	tag	parent
----	-----	--------

(0 rows)

```
***** QUERY *****
UPDATE new_tags SET tag = 'banana' WHERE tag = 'apple';
*****
```

```
move_record
-----
```

(1 row)

UPDATE 0

```
***** QUERY *****
SELECT * FROM new_tags;
*****
```

pk	tag	parent
1	fruits	NULL
3	banana	1

(2 rows)

```
***** QUERY *****
SELECT * FROM new_a_tags;
*****
```

pk	tag	parent
----	-----	--------

(0 rows)

```
***** QUERY *****
SELECT * FROM new_b_tags;
*****
```

pk	tag	parent
3	banana	1

(1 row)

```
***** QUERY *****
UPDATE new_tags SET tag = 'apple' WHERE tag = 'banana';
*****
```

move_record

(1 row)

UPDATE 0

```
***** QUERY *****
SELECT * FROM new_tags;
*****
```

pk	tag	parent
1	fruits	NULL
3	apple	1

(2 rows)

```
***** QUERY *****
SELECT * FROM new_a_tags;
*****
```

pk	tag	parent
3	apple	1

(1 row)

***** QUERY *****

SELECT * FROM new_b_tags;

pk	tag	parent
-----	-----	-----
(0 rows)		