**1. Створення структури БД.**

CREATE TABLE categories (

id INT PRIMARY KEY NOT NULL,

name varchar(50) NOT NULL Unique

);

CREATE TABLE categories\_en(

id INT not null unique references categories(id),

name varchar(50) NOT NULL

);

CREATE TABLE products(

id INT PRIMARY KEY NOT NULL,

name varchar(50) NOT NULL,

category\_id INT references categories(id)

);

CREATE TABLE options(

id INT PRIMARY KEY NOT NULL,

name varchar(50) NOT NULL

);

CREATE TABLE category\_option(

category\_id int references categories(id),

option\_id int references options(id)

);

**2. Типи користувацьких обмежень.**

**Not Null**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL

);

**Check**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL,

count\_products **REAL check**(count\_products>0)

);

**Unique**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL **Unique**

);

**Primary Key**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL

);

**Foreign Key**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL

);

**CREATE** **TABLE** products(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL,

category\_id INT references categories(id)

);

**Exclusion**

**CREATE** **TABLE** categories(

id **INT PRIMARY KEY** NOT NULL,

name varchar(50) NOT NULL,

EXCLUDE USING gist (name **WITH** = )

);

**Dropping constraint**

ALTER TABLE categories DROP CONSTRAINT gist;

**5. DML команди.**

**SELECT**

SELECT \* FROM products;

SELECT name FROM categories

[WHERE id= 1 ORDER BY name [ASC | DESC]];

SELECT DISTINCT name FROM products;

SELECT \* FROM categories WHERE name LIKE '\*техніка\*';

**INSERT**

INSERT INTO categories (id, name) VALUES(1, “Побутова техніка”);

INSERT INTO categories (name) VALUES(“Побутова техніка”);

**UPDATE**

UPDATE categories SET name = ’Холодильники’ WHERE id = 1;

UPDATE categories SET name = ‘Холодильники’;

**DELETE**

DELETE FROM products WHERE id=1;

DELETE FROM products;