**Сначала создаем продукты:**

CREATE TABLE Products (id INT PRIMARY KEY IDENTITY, name VARCHAR(255) NOT NULL);

**Далее создаем Категории:**

CREATE TABLE Category (id INT PRIMARY KEY IDENTITY, name VARCHAR(255) NOT NULL);

**Далее созданим связи и промеж. таблицу:**

CREATE TABLE ProdCat( products\_id INT NOT NULL, category\_id INT NOT NULL, FOREIGN KEY(products\_id) REFERENCES Products(id) ON DELETE CASCADE, FOREIGN KEY(category\_id) REFERENCES Category(id) ON DELETE CASCADE);

CREATE UNIQUE INDEX prod\_cat ON ProdCat(products\_id, category\_id);

**Заполним Базу произвольными значениями:**

INSERT INTO Products VALUES(Компьютер), (‘Телефон'), ('Планшет'), (‘Стол’), (‘Стул’);

INSERT INTO Category VALUES('Мебель), ('Электроника');

INSERT INTO ProdCat VALUES(1, 2), (2, 2), (3, 2), (4, 1), (5, 1);

Решение задачи:

SELECT p.name AS product, c.name AS category FROM Products AS p

LEFT JOIN ProdCat AS pc ON p.id = pc.products\_id

INNER JOIN Category AS c ON c.id = pc.category\_id

ORDER BY product;