**MS SQL SERVER** **ЗАПРОС:**

CREATE TABLE ProductCategory (

Id int NOT NULL IDENTITY(1,1) PRIMARY KEY,

ProductId int,

CategoryId int,

CONSTRAINT FK\_ProductId FOREIGN KEY (ProductId)

REFERENCES Product(Id)

CONSTRAINT FK\_CategoryId FOREIGN KEY (CategoryId)

REFERENCES Category(Id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

SELECT Product.Name AS ‘Продукт’, Category.Name AS ‘Категория’ FROM Product

LEFT JOIN ProductCategory AS p\_c ON Product.Id = p\_c.ProductId

LEFT JOIN Category ON Category.Id = p\_c.CategoryId;

**Дополнительно PostgreSQL (с проверкой):**

CREATE TABLE product (

id SERIAL PRIMARY KEY,

name TEXT

);

INSERT INTO product VALUES

(1, 'Мяч');

INSERT INTO product VALUES

(2, 'Ракетка');

INSERT INTO product VALUES

(3, 'Футболка');

INSERT INTO product VALUES

(4, 'Игрушка');

CREATE TABLE category (

id SERIAL PRIMARY KEY,

name TEXT

);

INSERT INTO category VALUES

(1, 'Спорт');

INSERT INTO category VALUES

(2, 'Одежда');

INSERT INTO category VALUES

(3, 'Важные вещи');

CREATE TABLE product\_to\_category (

id SERIAL PRIMARY KEY,

product\_id INTEGER,

category\_id INTEGER,

CONSTRAINT "FK\_product\_id" FOREIGN KEY ("product\_id")

REFERENCES "product" ("id"),

CONSTRAINT "FK\_category\_id" FOREIGN KEY ("category\_id")

REFERENCES "category" ("id")

);

INSERT INTO product\_to\_category VALUES

(1, 1, 1);

INSERT INTO product\_to\_category VALUES

(2, 1, 3);

INSERT INTO product\_to\_category VALUES

(3, 2, 1);

INSERT INTO product\_to\_category VALUES

(4, 3, 2);

INSERT INTO product\_to\_category VALUES

(5, 4, null);

**ЗАПРОС:**

**SELECT product.name AS "Продукт", category.name AS "Категория" FROM product**

**LEFT JOIN product\_to\_category AS p\_c ON product.id = p\_c.product\_id**

**LEFT JOIN category ON category.id = p\_c.category\_id;**

