CREATE TABLE Product(

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

Name nvarchar(128) NOT NULL

);

CREATE TABLE Category(

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

Name nvarchar(256) NOT NULL

);

CREATE TABLE ProductCategory(

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

ProductId smallint NOT NULL,

CategoryId smallint NOT NULL

);

ALTER TABLE ProductCategory

ADD CONSTRAINT FK\_ProductCategory\_Product\_ProductId

FOREIGN KEY(ProductId)

REFERENCES Product (Id);

ALTER TABLE ProductCategory

ADD CONSTRAINT FK\_ProductCategory\_Category\_CategoryId

FOREIGN KEY(CategoryId)

REFERENCES Category (Id);

Select p.Name as ProductName,

c.Name as CategoryName

from Product p

left join ProductCategory pc on pc.ProductId = p.Id

left join Category c on pc.CategoryId = c.Id

order by p.Name, c.Name