

```
DROP TABLE Receipt_Item;
DROP TABLE Receipt;
DROP TABLE Store;
DROP TABLE Product;
DROP TABLE Category;
DROP VIEW product_per_category;
```

```
CREATE TABLE Category (
  Id    INTEGER PRIMARY KEY,
  Name  VARCHAR(20) UNIQUE NOT NULL
);
```

```
CREATE TABLE Product (
  Id      INTEGER PRIMARY KEY,
  Name    VARCHAR(20) NOT NULL,
  CategoryId INTEGER NOT NULL REFERENCES Category(Id),
  Price   Numeric(7,2) CHECK (Price>0)
);
```

```
CREATE TABLE Store (
  Id      INTEGER PRIMARY KEY,
  Name    VARCHAR(20) UNIQUE NOT NULL
);
```

```
CREATE TABLE Receipt (
  Id INTEGER PRIMARY KEY,
  IssuedOn DATE,
  StoreId INTEGER REFERENCES Store(Id)
);
```

```
CREATE TABLE Receipt_Item (
  ReceiptId INTEGER REFERENCES Receipt(id),
  ProductId INTEGER REFERENCES Product(id),
  Quantity  INTEGER NOT NULL,
  CONSTRAINT RI_PK PRIMARY KEY (ReceiptId,ProductId)
);
```

```
INSERT INTO Category(Id,Name) VALUES(1,'Books');
INSERT INTO Category(Id,Name) VALUES(2,'Toys');
INSERT INTO Category(Id,Name) VALUES(3,'Miscellaneous');
```

```
INSERT INTO Product(Id,Name,CategoryId,Price) VALUES(1,'Toy Train',1,20.50);
INSERT INTO Product(Id,Name,CategoryId,Price) VALUES(2,'Toy Car',1,10.22);
INSERT INTO Product(Id,Name,CategoryId,Price) VALUES(3,'Toy Boat',1,30.25);
INSERT INTO Product(Id,Name,CategoryId,Price) VALUES(4,'The Bat in the Mat',2,3.25);
INSERT INTO Product(Id,Name,CategoryId,Price) VALUES(5,'Green Frog Red Frog',2,5.25);
```

```
INSERT INTO Store(Id,Name) VALUES(1,'Hypermall Branch');
INSERT INTO Store(Id,Name) VALUES(2,'Downtown Branch');
INSERT INTO Store(Id,Name) VALUES(3,'Midtown Branch');
```

```
INSERT INTO Receipt(id,IssuedOn,StoreId) VALUES (1,'1/Jan/2007',1);
INSERT INTO Receipt(id,IssuedOn,StoreId) VALUES (2,'2/Feb/2007',2);
INSERT INTO Receipt(id,IssuedOn,StoreId) VALUES (3,'3/Mar/2007',2);
```

```
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (1,1,2);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (1,2,1);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (2,1,1);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (2,3,1);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (2,5,2);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (3,1,1);
INSERT INTO Receipt_Item(ReceiptId,ProductId,Quantity) VALUES (3,2,2);
```

/*My code from here on*/

```
SELECT Id, Name
FROM Product
WHERE CategoryId=2;
```

```
SELECT Product.Id, Product.Name
FROM Product, Category
WHERE Category.Name='Books'
AND Product.CategoryId=Category.Id;
```

```
SELECT COUNT(*) FROM Store;
```

```
SELECT S.Id AS Store_id, COUNT(R.Id) AS Receipt_count
FROM Receipt R RIGHT OUTER JOIN Store S ON (R.StoreId=S.Id)
GROUP BY S.Id;
```

```
SELECT C.Name AS category_name, COUNT(P.Id) AS product_count_between_20_30
FROM Product P RIGHT OUTER JOIN Category C ON (P.CategoryId=C.Id AND P.Price >= 20 AND P.Price <= 30)
GROUP BY C.Id, C.Name;
```

```
CREATE VIEW product_per_category AS
SELECT C.Id AS category_id, C.Name AS category_name, COUNT(P.Id) AS product_count
FROM Product P RIGHT OUTER JOIN Category C ON (P.CategoryId=C.Id)
GROUP BY C.Id, C.Name;
```

```
SELECT * FROM product_per_category;
```