



Fig.1. Database diagram.

1: Produce an unduplicated list of all product IDs for all Products that have been sold. Sort the List.

```
SELECT Product_ID FROM Product WHERE Status='sold' ORDER BY Product_ID
```

2: Show the basket ID, Product ID, Product name, and description for all items. (Do it two ways-one with an ANSI join and one with a traditional Join.)

First:

```
SELECT pr.Product_ID,bas.Basket_ID,pr.Product_Name,pr.Description FROM Product AS pr,Basket AS bas
```

Second:

```
SELECT pr.Product_ID,bas.Basket_ID,pr.Product_Name,pr.Description FROM Product AS pr JOIN Basket AS bas ON pr.Product_ID!=null
```

3: Modify all queries in step 2 to include the customer's last name.

First:

```
SELECT pr.Product_ID,bas.Basket_ID,pr.Product_Name,pr.Description,sh.First_Name FROM Product AS pr,Basket AS bas, Shopper As sh
```

Second:

```
SELECT sh.First_Name, pr.Product_ID,bas.Basket_ID,pr.Product_Name,pr.Description FROM Product AS pr JOIN Basket AS bas JOIN Shopper AS sh ON sh.Shopper_ID!=0 ON pr.Product_ID!=0
```

4: Display all orders (basket ID, Shopper ID, and date ordered) placed in February 2012. The date should be displayed in this format: February 12, 2012.

```
SELECT bas.Date,bas.Basket_ID,pr.Description,sh.Shopper_ID FROM Product AS pr,Basket AS bas,Shopper AS sh WHERE bas.Date LIKE 'February____2012'
```

5: Display the total quantity sold by the product ID.

```
SELECT Count(Product_ID) AS total_quantity FROM Product WHERE Status='sold' GROUP BY Product_ID
```

6: Modify the query in step 5 to show only products that have sold less than a quantity of 3.

```
SELECT Count(Product_ID) AS total_quantity FROM Product WHERE Status='sold' GROUP BY Product_ID HAVING Count(Product_ID)<3
```

7: List all active coffee products (product ID, name, and price) for all coffee items priced above the overall average of coffee items.

```
SELECT Product_ID,Product_Name,Price FROM Product WHERE Price > (SELECT AVG(Price) FROM Product) AND Product_Name='coffee%'
```

8: Create a table named CONTACTS that includes the following columns.

/// what following columns you want?

```
CREATE TABLE CONTACTS (
ID int Primary Key,
First_Name nvarchar(50) NOT NULL,
Last_Name nvarchar(50) NOT NULL
)
```