

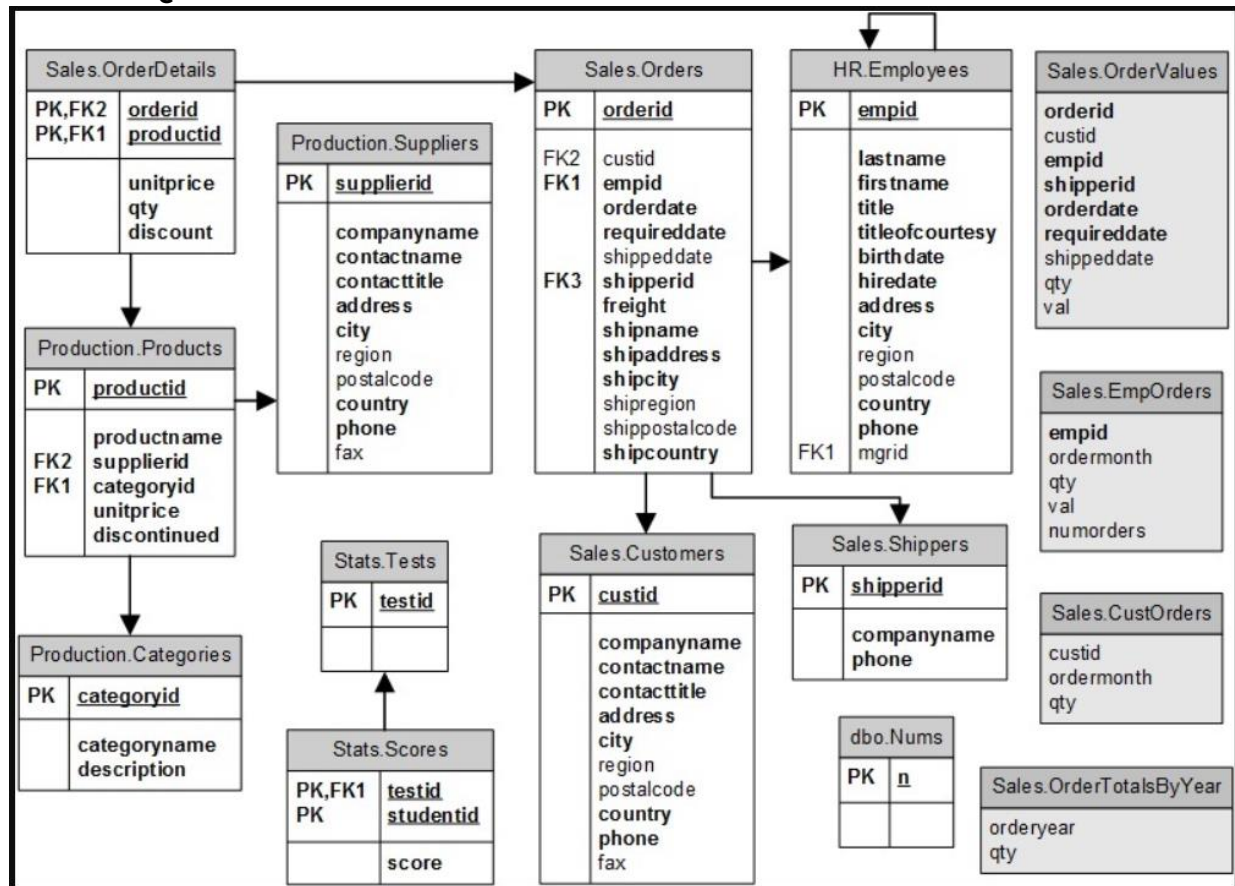
/*

Neba Nfonsang

Project 6: Queries that modify data using certain keywords

*/

USE TSQLV4



```
/*  
Query # 0: First Create an Orders table in the dbo  
schema that would be used for data modification  
*/
```

```
--DROP TABLE IF EXISTS dbo.OrderDetails
```

```
DROP TABLE IF EXISTS dbo.Orders;
```

```
CREATE TABLE dbo.Orders  
(  
    orderid      INT                NOT NULL  
        CONSTRAINT PK_Orders PRIMARY KEY,  
    orderdate    DATE                NOT NULL  
        CONSTRAINT DET_orderdate DEFAULT  
(SYSDATETIME()),  
    empid        INT                NOT NULL,  
    custid       VARCHAR(10)        NOT NULL  
);
```

```
/*  
Query # 1: How to insert a single row of values  
*/
```

```
INSERT INTO  dbo.Orders (orderid, orderdate, empid,  
custid)  
VALUES(10001, '20160212', 3, 'A');
```

```
/*  
Query # 2: Inserting multiple values  
*/
```

```
INSERT INTO dbo.Orders  
  
    (orderid, orderdate, empid, custid)  
VALUES  
    (10003, '20160213', 4, 'B'),  
    (10004, '20160214', 1, 'A'),  
    (10005, '20160213', 1, 'C'),  
    (10006, '20160215', 3, 'C');
```

```
/*  
Query # 3: Using the INSERT SELECT statement  
*/
```

```
INSERT INTO dbo.Orders(orderid, orderdate, empid,  
custid)  
    SELECT orderid, orderdate, empid, custid  
    FROM Sales.Orders  
    WHERE shipcountry = N'UK';
```

```
/*  
Query # 4: Using INSERT EXEC to insert results  
returned from a stored procedure or dynamic sql  
*/
```

```
DROP PROC IF EXISTS Sales.GetOrders;  
GO
```

```
CREATE PROC Sales.GetOrders
```

```
@country AS NVARCHAR(40)
AS
```

```
SELECT orderid, orderdate, empid, custid
FROM Sales.Orders
WHERE shipcountry = @country;
GO
```

```
-- use this to test the stored procedure: EXEC
Sales.GetOrders @country = N'France';
```

```
INSERT INTO dbo.Orders(orderid, orderdate, empid,
custid)
EXEC Sales.GetOrders @country = N'France';
```

```
/*
Query # 5: Use SELECT INTO to populate a created
table with the results of a query
*/
```

```
DROP TABLE IF EXISTS dbo.Orders;
```

```
SELECT orderid, orderdate, empid, custid
INTO dbo.Orders
FROM Sales.Orders;
```

```
/*
Query # 6: SELECT INTO can be used with the results
of a set operator
*/
```

```
DROP TABLE IF EXISTS dbo.Locations;
```

```
SELECT country, region, city
```

```
INTO dbo.Locations  
FROM Sales.Customers
```

```
EXCEPT
```

```
SELECT country, region, city  
FROM HR.Employees;
```

```
/*  
  Create the T1 table  
*/
```

```
DROP TABLE IF EXISTS dbo.T1;
```

```
CREATE TABLE dbo.T1  
(  
    keycol INT NOT NULL IDENTITY(1, 1)  
    CONSTRAINT PK_T1 PRIMARY KEY,  
    datacol VARCHAR(10) NOT NULL  
    CONSTRAINT CHK_T1_datacol CHECK(datacol LIKE  
'[ABCDEFGHIIJKLMNOPQRSTUVWXYZ]%')  
);
```

```
INSERT INTO dbo.T1(datacol)  
VALUES('AAAAA'),('CCCCC'),('BBBBB'), ('EEEEEE');
```

```
SET IDENTITY_INSERT dbo.T1 ON;  
INSERT INTO dbo.T1(keycol, datacol) VALUES(5,  
'FFFFF');  
SET IDENTITY_INSERT dbo.T1 OFF;
```

```
INSERT INTO dbo.T1(datacol) VALUES('GGGGG');
```

```
/*  
Query # 7: Use DELETE statement to delete a row of  
data  
*/
```

```
DELETE FROM dbo.T1  
WHERE datacol = 'AAAAA';
```

```
/*  
Query # 8: Use TRUNCATE to delete all rows from the  
data this statement has no filter  
*/
```

```
TRUNCATE TABLE dbo.T1;
```

```
/*  
Create a table that will be subsequently used with  
UPDATE statement  
*/
```

```
DROP TABLE IF EXISTS dbo.OrderDetails, dbo.Orders;
```

```
CREATE TABLE dbo.Orders  
(  
    orderid          INT          NOT NULL,  
    custid           INT          NULL,  
    empid            INT          NOT NULL,  
    orderdate        DATE         NOT NULL,  
    requireddate     DATE         NOT NULL,  
    shippeddate       DATE         NULL,  
    shipperid        INT          NOT NULL,  
    freight          MONEY        NOT NULL  
    CONSTRAINT DFT_Orders_freight DEFAULT(0),
```

```

    shipname          NVARCHAR(40) NOT NULL,
    shipaddress       NVARCHAR(60) NOT NULL,
    shipcity          NVARCHAR(15) NOT NULL,
    shipregion        NVARCHAR(15) NULL,
    shippostalcode   NVARCHAR(10) NULL,
    shipcountry       NVARCHAR(15) NOT NULL,
    CONSTRAINT PK_Orders PRIMARY KEY(orderid)
);

```

```

CREATE TABLE dbo.OrderDetails
(
    orderid    INT          NOT NULL,
    productid  INT          NOT NULL,
    unitprice  MONEY        NOT NULL
        CONSTRAINT DFT_OrderDetails_unitprice
DEFAULT(0),
    qty        SMALLINT     NOT NULL
        CONSTRAINT DFT_OrderDetails_qty DEFAULT(1),
    discount   NUMERIC(4, 3) NOT NULL
        CONSTRAINT DFT_OrderDetails_discount DEFAULT(0),
    CONSTRAINT PK_OrderDetails PRIMARY KEY(orderid,
productid),
    CONSTRAINT FK_OrderDetails_Orders FOREIGN
KEY(orderid)
        REFERENCES dbo.Orders(orderid),
    CONSTRAINT CHK_discount CHECK (discount BETWEEN 0
AND 1),
    CONSTRAINT CHK_qty CHECK (qty > 0),
    CONSTRAINT CHK_unitprice CHECK (unitprice >= 0)
);
GO

```

```

INSERT INTO dbo.Orders SELECT * FROM Sales.Orders;

```

```
INSERT INTO dbo.OrderDetails SELECT * FROM  
Sales.OrderDetails;
```

```
/*
```

```
Query # 9:
```

```
*/
```

```
UPDATE dbo.OrderDetails  
    SET discount = discount + 0.05  
WHERE productid = 51;
```

```
/*
```

```
Query # 10: Update the discount column where product  
id is 51
```

```
*/
```

```
UPDATE dbo.OrderDetails  
    SET discount += 0.05  
WHERE productid = 51;
```

```
/*
```

```
EXTRA Query: All-at-once operations
```

```
*/
```

```
UPDATE dbo.T1  
    SET col1 = col1 + 10, col2 = col1 + 10;
```