CREATE DATABASE SUBQUERY

GO

USE SUBQUERY

GO

CREATE TABLE PRODUCTS

(

PRODUCTID INT IDENTITY PRIMARY KEY NOT NULL,

PRODUCT\_NAME VARCHAR (100) NULL,

PRODUCT\_DECS VARCHAR (125) NULL)

CREATE TABLE SALES

(

SALESID INT IDENTITY PRIMARY KEY NOT NULL,

PRODUCTID INT FOREIGN KEY REFERENCES PRODUCTS (PRODUCTID),

PRODUCT\_PRICE INT NULL,

PRODUCT\_QTY INT NULL)

SELECT \* FROM PRODUCTS

SELECT \* FROM SALES

INSERT INTO PRODUCTS

VALUES

('HARLEY DAVIDSON','HARLEY BIKE THAT HAS TOP SPEED OF 180 MPH'),

('AUSTIN MARTIN','TOP JAMES BOND MODEL OF CHOICE'),

('SESNA','SINGLE ENGINE PLANE, EASY TO FLY')

INSERT INTO SALES (PRODUCTID, PRODUCT\_PRICE, PRODUCT\_QTY)

VALUES

(2, 125000, 5),

(3, 155000, 1),

(2, 125000, 5),

(3, 125000, 2),

(2, 125000, 1)

SELECT \* FROM PRODUCTS

SELECT \* FROM SALES

--FIND ALL THE ITEMS THAT HAVE NOT BEEN SOLD?

--First look at the sales table and observe that we do not see any productid for item 1 (Harley Davidson), thus we know no Harleys were sold

--Let’s break down how the sub query works

--Part 1 - Outer query- provides us with all results of products table

SELECT PRODUCTID, PRODUCT\_DECS, PRODUCT\_DECS --<< Outer query

FROM PRODUCTS

--Part 2 - THEN the condition asks, give me all the PRODUCTID OF PRODUCT TABLE NOT IN the inner/sub query

WHERE PRODUCTID NOT IN

--Part 3 - Inner query or sub query that executes first

(SELECT DISTINCT PRODUCTID FROM SALES)--<< Inner query OR SUBQUERY (When using the where clause, it should contain only one column (productid))

--Give the total quantities sold of each product?

SELECT \* FROM PRODUCTS

SELECT \* FROM SALES

Select SUM (PRODUCT\_QTY)

From SALES --<< Gives us the total products sold; however, we want to know how many of each are sold

SELECT PRODUCT\_NAME,

(Select SUM (PRODUCT\_QTY)

From SALES

Where PRODUCTID = PRODUCTS.PRODUCTID) AS QTYFOREACHITEM

FROM PRODUCTS

--What was the total sales of each product?

SELECT PRODUCT\_NAME,

(Select SUM (PRODUCT\_PRICE)

From SALES

Where PRODUCTID = PRODUCTS.PRODUCTID) AS QTYFOREACHITEM

FROM PRODUCTS

--Which product sold 5 or more quantities?

SELECT PRODUCTID, PRODUCT\_NAME, PRODUCT\_DECS

FROM PRODUCTS

WHERE PRODUCTID IN

(SELECT PRODUCTID

FROM SALES

WHERE PRODUCT\_QTY = 5)