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IST659 Lab #7

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1. Code and Execute the SQL to add the new tables and relationships per the

following diagram:

-- CREATE Vendor Table

IF EXISTS (SELECT \* FROM INFORMATION\_SCHEMA.TABLES WHERE TABLE\_NAME = 'Vendor' )

BEGIN

DROP TABLE Vendor

END

GO

CREATE TABLE Vendor (

VendorID int identity primary key

, VendorName char(30)

)

GO

--CREATE VendorProduct Table + Foreign Keys

IF EXISTS (SELECT \* FROM INFORMATION\_SCHEMA.TABLES WHERE TABLE\_NAME = 'VendorProduct' )

BEGIN

DROP TABLE VendorProduct

END

GO

Create TABLE VendorProduct (

VendorProductID int identity primary key

, Cost decimal (12,4) NOT NULL

, ProductID int FOREIGN KEY REFERENCES Product(ProductID) NOT NULL

, VendorID int FOREIGN KEY REFERENCES Vendor(VendorID) NOT NULL

)

GO

2. Code and execute the INSERT statements to add the following Vendors to the Vendor table:

--- ADD VENDOR Names into Vendor Table

INSERT INTO Vendor (VendorName)

VALUES ('Spikey')

INSERT INTO Vendor (VendorName)

VALUES ('Tweebox')

INSERT INTO Vendor (VendorName)

VALUES ('Ernder Ermer')

Select \* From Vendor

3. Code and execute the INSERT statements to add the following values to the Vendor Product

table (note: you will need to find the appropriate ProductID and VendorID for each row –

brownie points if you can do it as part of your INSERT statement!)

Insert INTO VendorProduct (Cost, ProductID, VendorID)

VALUES ('50', '1', '1'), ('45','2','1'), ('30', '3', '1'), ('55', '1', '2'), ('20', '6','2'), ('60', '1', '3'), ('25', '6', '3')

4. Execute the following code against your database:

Select

Product.ProductName

, Vendor.VendorName

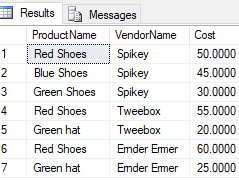
, VendorProduct.Cost

From Product

Join VendorProduct on VendorProduct.ProductID = Product.ProductID

Join Vendor ON Vendor.VendorID = VendorProduct.VendorID

a. Paste a screenshot of the results of that query to your lab document.



b. Are there any products missing? If so, why? Answer in your lab document.

**We are missing ‘blue shorts’ from the product table, because there is no foreign key value that is referencing them on the VendorProduct Table.**

c. Revise the query to show any missing products (if there are any)

Select

Product.ProductName

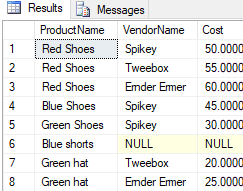
, Vendor.VendorName

, VendorProduct.Cost

From Product

FULL OUTER JOIN VendorProduct on VendorProduct.ProductID = Product.ProductID

FULL OUTER Join Vendor ON Vendor.VendorID = VendorProduct.VendorID



5. Rewrite the query in question 4 to add the average, minimum, and maximum costs of each

product. Hint: Remove the Vendor info and think Aggregates!

1. Code and execute this query. Copy and paste the code to your lab document.

Select

Product.ProductName

, MIN(VendorProduct.Cost) AS min\_cost

, MAX(VendorProduct.Cost) AS max\_cost

, AVG(VendorProduct.Cost) AS avg\_cost

From Product

Join VendorProduct on VendorProduct.ProductID = Product.ProductID

GROUP BY ProductName

1. Paste a screenshot of the results to your lab document.

