ACMEKart Logistics

ACME-Kart , an online E-Commerce Company is automating it's order system. ACME-Kart has outsourced a part of the database and application creation towards you. All that ACME requires from you is a set of tables and relations with all constraints defined for the Products and Orders made by the Customers. Each Customer can place mutliple Orders, and each order can contain multiple ProdOrdCount. Each product on the other side can have multiple ProdOrdCount. It's mandatory for an Order to have a Customer. It's mandatory for the ProdOrdCount to have an Order and a Product associated with it.

The data dictionary for this requirement is as below:

Create the following tables with the primary, foreign keys and check constraints as  mentioned below:

**1.    Customer**

        Primary Key : pk\_Customer

**2.    Product**

        Primary Key : pk\_Product

        Check Constraint : ck\_Rating

       The **Product** table's **Rating** should have a Constraint defined that the rating ranges from 0 to 5.

**3.    Orders**

        Primary Key : pk\_Orders

        Foreign Key : fk\_Orders\_Customer (for the Customer Table)

**4.     ProdOrdCount**

        Primary Key : pk\_ProdOrdCount

        Foreign Key : fk\_ProdOrdCount\_Product (for the Product Table)

        Foreign Key : fk\_ProdOrdCount\_Orders (for the Orders Table)

Use **GO** as the terminator for the statements, instead of (**;**)semicolon.

Ans:

create table Customer(

CustomerID int not null,

LastName varchar(50) not null,

FirstName varchar(50) not null,

Email varchar(100) not null,

Phone varchar(10) not null,

AdddressLine1 varchar(50) not null,

AdddressLine2 varchar(50) not null,

City varchar(50) not null,

State varchar(50) not null,

PostalCode varchar(10) not null,

Country varchar(50) not null,

Emailverified char(1) not null

)

go

Alter table Customer

add constraint pk\_Customer primary key(CustomerID)

go

create table Product(

ProductID int not null,

ProductDesc varchar(50) not null,

VendorDesc varchar(50) not null,

Rating int not null,

SellingPrice decimal(9,2) not null,

Discount int not null

)

go

Alter table Product

add constraint pk\_Product primary key(ProductID)

go

Alter table Product

add constraint ck\_Rating Check(Rating>=0 and Rating<=5)

go

create table Orders(

OrderID int not null,

CustomerID int not null,

OrderDate date not null,

ShipmentDate date not null,

Status char(1) not null,

Comments varchar(50)

)

go

alter table Orders

add constraint pk\_Orders primary key(OrderID)

go

alter table Orders

add constraint fk\_Orders\_Customer foreign key(CustomerID) references Customer(CustomerID)

go

create table ProdOrdCount(

ProdOrdID int not null,

OrderID int not null,

ProductID int not null,

Quantity int not null

)

go

alter table ProdOrdCount

add constraint pr\_ProdOrdCount primary key(ProdOrdID)

go

alter table ProdOrdCount

add constraint fk\_ProdOrdCount\_Product foreign key(ProductID) references Product(ProductID)

go

alter table ProdOrdCount

add constraint fk\_ProdOrdCount\_Orders foreign key(OrderID) references Orders(OrderID)

go