CREATE TABLE Customer(

customerID varchar(20) NOT NULL,

firstname varchar(10),

lastname varchar(10),

street varchar(20),

city varchar(20),

state varchar(20),

zipcode varchar(10),

PRIMARY KEY(customerID));

\*address, new table, based on zipcode?

INSERT INTO customer VALUES(

"10001","Bob","Walk",

"Fifth", "Pittsburgh",

"PA","15001")

INSERT INTO customer VALUES(

"10002","David","White",

"Sixth", "Pittsburgh",

"PA","15012")

CREATE TABLE BusinessCustomer(

customerID varchar(20) NOT NULL,

firstname varchar(10),

lastname varchar(10),

street varchar(20),

city varchar(20),

state varchar(20),

zipcode varchar(10),

business\_category varchar(10),

company\_income REAL,

PRIMARY KEY(customerID));

\*business category?

\*company income > 0?

INSERT INTO BusinessCustomer VALUES(

"10001","Bob","Walk",

"Fifth", "Pittsburgh",

"PA","15001",

"IT", 2000000)

INSERT INTO BusinessCustomer VALUES(

"10003","Kate","Black",

"Fifth", "Pittsburgh",

"PA","15001",

"Media", 500000)

CREATE TABLE HomeCustomer(

customerID VARCHAR(20) NOT NULL,

firstname VARCHAR(10),

lastname VARCHAR(10),

street VARCHAR(20),

city VARCHAR(20),

state VARCHAR(20),

zipcode VARCHAR(10),

marriage\_status VARCHAR(20),

gender VARCHAR(10),

age INT,

income REAL,

PRIMARY KEY(customerID));

\*check?

INSERT INTO HomeCustomer VALUES(

"10002","David","White",

"Sixth", "Pittsburgh",

"PA","15012",

"married","male",38,50000)

INSERT INTO HomeCustomer VALUES(

"10004","Casey","Green",

"Forbes", "Pittsburgh",

"PA","15052",

"unmarried","female",21,18000)

CREATE TABLE Products(

productID varchar(10) NOT NULL,

product\_name varchar(10),

inventory\_amount int,

price REAL,

product\_kind varchar(20),

PRIMARY KEY(productID

check(product\_kind in('Apple','Nokia','Samsung','HTC')

and inventory\_amount >= 0)

);

INSERT INTO Products VALUES(

"001","iphone4",20,300,"Apple")

INSERT INTO Products VALUES(

"002","Galaxy3",50,200,"Samsung")

CREATE TABLE Products(

productID varchar(10) NOT NULL,

product\_name varchar(10),

inventory\_amount int,

price REAL,

product\_kind varchar(20),

PRIMARY KEY(productID),

check product\_kind in("Apple","Nokia","Samsung","HTC")

);

CREATE TABLE Products(

productID varchar(10) NOT NULL,

product\_name varchar(10),

inventory\_amount int,

price REAL,

product\_kind varchar(20),

PRIMARY KEY(productID));

\*product\_kind: apple, nokia, and so on.

CREATE TABLE Salesperson(

salesID varchar(10) NOT NULL,

sales\_name varchar(15),

address varchar(20),

email varchar(20),

job\_title varchar(15),

store\_assigned varchar(10),

salary int,

PRIMARY KEY(salesID),

FOREIGN KEY(store\_assigned) REFERENCES Store(storeID)

ON UPDATE CASCADE

ON DELETE SET NULL);

\*every salesman can only work in one store

INSERT INTO Salesperson VALUES(

"001","Joey","Penn","joey@gmail.com","salesman",

"01",1200);

INSERT INTO Salesperson VALUES(

"002","Pheobe","Penn","Pheobe@gmail.com","manager",

"01",1800);

INSERT INTO Salesperson VALUES(

"003","Monica","Penn","monica@gmail.com","region manager",

"01",2500);

INSERT INTO Salesperson VALUES(

"004","Rachel","Centre","rachel@gmail.com","salesman",

"02",1300);

CREATE TABLE store(

storeID varchar(10),

address varchar(20),

manager varchar(10),

num\_of\_salespersons int,

region varchar(10),

PRIMARY KEY (storeID),

FOREIGN KEY(manager) REFERENCES Salesperson(salesID)

ON UPDATE CASCADE,

FOREIGN KEY(region) REFERENCES Region(regionID)

ON UPDATE CASCADE

);

\*if manager or region is deleted, the delete action will be rejected. It has to update first, then delete.

INSERT INTO store VALUES(

"01","Penn","Pheobe",8,"shadyside");

INSERT INTO store VALUES(

"02","Centre",null,12,"shadyside");

CREATE TABLE Region(

regionID varchar(10) NOT NULL,

region\_name varchar(20),

region\_manager varchar(10),

PRIMARY KEY(regionID),

FOREIGN KEY(region\_manager) REFERENCES Salesperson(salesID)

ON UPDATE CASCADE

ON DELETE SET NULL);

\*region manager can be non-available when the previous manager was fired.

CREATE TABLE Transaction(

orderID varchar(10) NOT NULL,

productID varchar(10),

salesperson varchar(10),

quantity int,

customer varchar(20),

PRIMARY KEY(orderID, productID),

FOREIGN KEY(orderID) REFERENCES Orders(orderID)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY(productID) REFERENCES Products(productID)

ON UPDATE CASCADE,

FOREIGN KEY(salesperson) REFERENCES Salespersons(salesID)

ON DELETE SET NULL

ON UPDATE CASCADE,

FOREIGN KEY(customer) REFERENCES Customers(customerID)

);

CREATE TABLE Orders(

orderID varchar(10) NOT NULL,

customer varchar(20),

order\_date DATE,

total real,

PRIMARY KEY(orderID),

FOREIGN KEY(customer) REFERENCES customer(customerID)

);