**Giving you ERD for Jeff’s Shop answer the following questions:**

1. Draw a complete ERD for your solution showing all tables.
2. Select all customers with or without orders, for customers with orders list all order information

**tbl\_customerstbl\_orders**

1. List customers with orders only.

**tbl\_customers**⋈**tbl\_orders**

1. Find a Cartesianproduct of the customer and order tables

**tbl\_customersxtbl\_orders**

1. List all items that have not been ordered yet.

**∏**part\_number, part\_name**(tbl\_parts) - ∏**part\_number, part\_name**(tbl\_parts**⋈**tbl\_part\_details)**

1. List all ordered items

∏part\_number, part\_name**(tbl\_orders**⋈**tbl\_parts**⋈**tbl\_part\_details))**

1. List all orders that the customer did notpay for.

**tbl\_orders**⋈tbl\_payments.paid\_amount = 0**tbl\_payments**

1. List all orders paid with a check (assume you have a separate payment table)

**tbl\_orders**⋈(**tbl\_payments**⋈method\_name = ‘check’**tbl\_payment\_methods)**

1. Give all ordered items in Jan 2014 and not in Jan 2013.
2. List customer names and phone numbers from Texas with orders over $1000.

∏first\_name, last\_name, phone\_number**((tbl\_customers**⋈state = ‘TX’**tbl\_customer\_address)**⋈price > 1000**tbl\_orders)**

1. List all customers names along with their cities weather the customer has a city or not.

∏first\_name, last\_name, city(tbl\_customers⋈tbl\_customer\_address)

1. List all customers with cancelled orders.

∏first\_name,last\_name,order\_id,order\_time,price,order\_status(σorder\_status= ‘cancell’(tbl\_customers⋈tbl\_orders))

1. List all vendors and their items (list vendors only who has items in the database. Assume we have a separate table for vendors)

∏company\_name, contract\_name, part\_number, part\_name

(tbl\_supply\_details⋈tbl\_parts)

1. List sales total per month
2. List the customer with the highest order total
3. List the address and name of the customers who placed at least 2 orders

∏first\_name, last\_name, street\_address, postal\_code, city, state, address\_type, order\_number((tbl\_customer\_address⋈order\_number>=2tbl\_customers)⋈customer\_idCOUNT(order\_id)(tbl\_orders)))

1. List the average order total for all customers from Chicago

customer\_idavg(price)**(tbl\_orders** ⋈city= ‘Chicago’**tbl\_customer\_address)**

1. For each item list customers’ names who ordered it

∏part\_number, part\_number,first\_name, last\_name(tbl\_parts⋈tbl\_part\_details⋈tbl\_orders⋈tbl\_customers)

1. List the number of orders for each state (customer’s state).

stateCOUNT(order\_id)(tbl\_customer\_addresstbl\_orders)

1. List the name of your favorite professor.

∏first\_name, last\_name(σcourse\_id=’ITM422’(course))