**Normalization Exercise**

IT Supply

November 18, 2020

INvoice #1234

|  |  |
| --- | --- |
| Bill To | Ship To |
| |  |  | | --- | --- | | Customer | Databases ‘R Us | | Customer ID# | 3724 | | Address | 775 Normal Lane Relational KS, 66110 | | Phone | 913-999-8877 | | |  |  | | --- | --- | | Recipient | Database Administrator | | Address | 237 Boyce Avenue Codd KS, 67444 | | Phone | 913-787-0000 | |
| |  |  | | --- | --- | | Payment Due | December 18, 2020 | | Salesperson | Al Tuple | | Payment Terms | Net 30 | | |  |  | | --- | --- | | Delivery Date | November 30, 2020 | | Shipping Method | UPS | | Shipping Terms | FOB Shipping Point | |

| Qty. | Item# | Description | Unit Price | Discount | Line Total |
| --- | --- | --- | --- | --- | --- |
| 23 | 443 | Really fine user manual | 327.00 |  | 7,521.00 |
| 4 | 337 | User encouragement device (electric) | 74.00 |  | 296.00 |
| 44000 | 1007 | User Tolerance Assistance | 3.14 | 10% | 124,344.00 |
|  |  | Shipping |  |  | 0.00 |
|  |  | Order Total |  |  | 132,161.00 |
|  |  |  |  |  |  |

Thank you for your business!

**Create the appropriate tables, indexes to support this data in 3NF using SQL commands. Include an appropriate key structure, dependencies and relations between any tables. Add the data represented above (as necessary) to your tables. Create a query that returns the customer name, salesperson and order total. Turn the assignment in as one sql script. Also create an ER diagram of your schema. Turn that in as a JPG or PNG file.**

**Narrative for the assignment:**

You’ve been hired by the company IT Supply to create a database to track their orders.

IT Supply is a United States company that does domestic work only, primarily in the Midwest .

Sales staff is headquartered in Kansas City and there are several regional territories. There are 6 different sales people. One VP for sales manages all territories. Sales staff have the option of offering discounts on items ordered in large quantities (over 25,000). This is fully at the discretion of the sales person but is subject to review by the VP for sales. The maximum discount that can be offered is 10%.

Customers vary in size from mom & pop shops (very small) to large multi-location office supply chains. Databases ‘R Us for example has their HQ in Kansas, but locations in 15 different states that we ship directly to. All billing goes to their Relational Kansas office.

Multiple shipping methods are available with the most common being FOB shipping point where the customer pays the freight/delivery company directly. Shipping can also be handled as FOB destination point where IT Supply manages the shipping. Invoices carry a 2% mark-up for FOB destination point. We use the USPS, UPS, and DHS for deliveries.