Module 01 Tutorial Session

Question

Analyse the following form, and gather data into an unnormalised dataset.

#### From: Joe’s Supplies, 23 Downhill Slope, Welshpit, WA 6543

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Invoice#  12345 | |  | Customer#: 78901 | | |  | | Customer:  Fred Bloggs  3 Uphill Rise, | |  | |  | |
| Date: 29/5/02 | |  | Contact Ph:  08 9370 6111 | | |  | | Ferndale, WA 6303 | |  | |  | |
| Item# | Description | | | Qty | UnitPrice | | GST Code | | GST Rate | Tax | Subtotal | |
| 9898 | Bearing, Ball | | | 25 | $2.50 | | 1 | | 10% | $0.25 | $68.75 | |
| 9999 | Bearing, Roller | | | 10 | $5.00 | | 1 | | 10% | $0.5 | $55.00 | |
| 8888 | Seal, shaft | | | 10 | $3.00 | | 1 | | 10% | $0.30 | $33.00 | |
| 777 | Glasses, Safety | | | 10 | $10.00 | | 0 | | 0% | $0.00 | $100.00 | |
| 1555 | Punch, 5mm | | | 1 | $4.00 | | 1 | | 10% | $0.40 | $4.40 | |

Terms: Payment within 7 days Total: $261.15

**Analysis**

Assumption (or notes):

*The* ***From:…*** *address at the top of the invoice and the* ***Terms*** *at bottom are the same for all invoices, thus can be omitted.*

*The* ***GST Rate*** *can be omitted because it can be determined by the* ***GST Code****, where GST Code of 1 corresponds a GST Rate of 10%.*

*The* ***Tax*** *column can be omitted because it can be calculated from* ***GST Rate/Code*** *and the* ***Unitprice****.*

*The* ***Subtotal*** *and* ***Total*** *can be omitted because they can be calculated.*

***Customer name*** *and* ***customer address*** *are actually two attributes.*

**Solution**

***0NF***

R1 = (Invoice#, Date, Customer#**,** Customer Name, Customer Address, Contact Ph,

{Item#, Description, Qty, Unit Price, GST Code})

It is also valid to identify invoice details as a repeating group within customer details, as customers can have more than one order:

R1 = (Customer#**,** Customer Name, Customer Address, Contact Ph, {Invoice#, Date

{Item#, Description, Qty, Unit Price, GST Code}})