ASSIGMENT

**Q1** For the example below we have one big table. Put the table in normalized form. OID = Order ID, O\_ Date= Order Date, CID = Customer ID, C\_ Name = Customer Name, C\_ State = Customer’s State, PID = project id, P\_ Desc =Project Name, P\_ Price = Product Price, Qty = Quantity Purchased.

Note: 7, 5, 4 means three Product IDs. Similarly, 1, 1, 5 means three Quantities.

Functional Dependencies are: OID -> O\_ Date CID -> C\_ Name PID -> P\_ Desc PID -> P\_ Price OID -> CID CID -> C\_S tate PID and OID -> Qty.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| OID | O\_ Date | CID | C\_ Name | C\_ State | PID | P\_D esc | P\_ Price | Qty |
| 1006 | 10/24/09 | 2 | Apex | NC | 7, 5, 4 | Table, Desk, Chair | 800, 325, 200 | 1, 1, 5 |
| 1007 | 10/25/09 | 6 | Acme | GA | 11, 4 | Dresser, Chair | 500, 200 | 4, 6 |

Q1 What Is A Table In 1nf?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| OID | O\_DATE | CID | C\_NAME | C\_STATE | PID | P\_DESC | P\_PRICE | QTY |
| 1006 | 10/24/09 | 2 | APEX | NC | 7 | TABLE | 800 | 1 |
| 1006 | 10/24/09 | 2 | APEX | NC | 5 | DESK | 325 | 1 |
| 1006 | 10/24/09 | 2 | APEX | NC | 4 | CHAIR | 200 | 5 |
| 1007 | 10/25/09 | 6 | ACME | GA | 11 | DRESSER | 500 | 4 |
| 1007 | 10/25/09 | 6 | ACME | GA | 4 | CHAIR | 200 | 6 |

Q2 what is a table in 2NF?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| OID | O\_DATE | QTY |  | PID | P\_DESC | P\_PRICE |
| 1006 | 10/24/09 | 1 | 7 | TABLE | 800 |
| 1006 | 10/24/09 | 1 | 5 | DESK | 325 |
| 1006 | 10/24/09 | 5 | 4 | CHAIR | 200 |
| 1007 | 10/25/09 | 4 | 11 | DRESSER | 500 |
| 1007 | 10/25/09 | 6 | 4 | CHAIR | 200 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CID | C\_NAME | C\_STATE | OID | O\_DATE |
| 2 | APEX | NC | 1006 | 10/24/09 |
| 2 | APEX | NC | 1006 | 10/24/09 |
| 2 | APEX | NC | 1006 | 10/24/09 |
| 6 | ACME | GA | 1007 | 10/25/09 |
| 6 | ACME | GA | 1007 | 10/25/09 |

Q3 what is a table in 3NF?

|  |  |  |  |
| --- | --- | --- | --- |
| CID | C\_NAME | C\_STATE | PID |
| 2 | APEX | NC | 7 |
| 2 | APEX | NC | 5 |
| 2 | APEX | NC | 4 |
| 6 | ACME | GA | 11 |
| 6 | ACME | GA | 4 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| OID | O\_DATE | QTY | CID |  | PID | P\_DESC | P\_PRICE |
| 1006 | 10/24/09 | 1 | 2 | 7 | TABLE | 800 |
| 1006 | 10/24/09 | 1 | 2 | 5 | DESK | 325 |
| 1006 | 10/24/09 | 5 | *2* | *4* | *CHAIR* | *200* |
| 1007 | 10/25/09 | 4 | *6* | *11* | *DRESSER* | *500* |
| 1007 | 10/25/09 | 6 | *6* | *4* | *CHAIR* | *200* |