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A.Step 1

Supplier, Product, ImportDate -> Quantity Supplier, Product, ImportDate -> Cost Product -> DeptCode

Product -> DeptCode

Product -> UnitOfMeasure

A.Step 2

This doesn't satisfy any normal forms(1NF, 2NF, 3NF), because there are several repeating groups(Supplier and Product) in it. In 1NF, there should not be multivalued attributes or composite attributes, so this doesn't satisfy any one of normal forms.

A.Step 3

Supplier(Supplier_ID, Supplier_name)

Product(Product ID, Product_name)

Store(Product_ID, DeptCode, UnitOfMeasure)

Buy(Supplier ID, Product ID, ImportDate, Quantity, Cost)

B.Step 1

Dept -> DeptName

ProductCode -> Dept

ProductCode -> DeptName

ProductCode -> UnitofMeasure

ProductCode, Date -> ListPrice

ProductCode, Date -> Quantity

B.Step 2

This satisfies the 1NF, but not 2NF, 3NF. Because there are not repeating groups in table, however partial dependence is in it.

B.Step 3

Department(<u>Dept</u>, DeptName)

Sell(<u>ProductCode</u>, <u>Date</u>, ListPrice, Quantity)

Product(<u>ProductCode</u>, Dept, UnitofMeasure)

C.Step 1
ReceiptID -> CustID
ReceiptID -> CustName
ReceiptID -> MembershipStatus
ReceiptID -> Discount
ReceiptID -> DateandTime
ReceiptID, ProductCode -> ActualPrice
ReceiptID, ProductCode -> Quantity
CustID -> CustName
CustID -> MembershipStatus
CustID -> Discount
MembershipStatus -> Discount
C.Step 2
This satisfies the 1NF, but not 2NF, 3NF. Because there are not repeating groups in table, however partial dependence is in it.
C.Step 3
Customer(CustID, CustName, MembershipStatus)
Membership(MembershipStatus, Discount)
ReceiptMade(ReceiptID, CustId, DateandTime)
ReceiptItem(ReceiptID, ProductCode, Quantity, ActualPrice)
