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Primary key in original: (Supplier, Product, ImportDate)
A.Step 1
Supplier, Product, ImportDate -> Quantity
Supplier, Product, ImportDate -> Cost
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 which are not atomic. 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, DeptCode, UnitOfMeasure)
Buy(Supplier_ID, Product_ID, ImportDate, Quantity, Cost)

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Primary key in original: (ProductCode, Date)
B.Step 1
Dept -> DeptName
ProductCode -> Dept
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(Dept, DeptName)
Sell(ProductCode, Date, ListPrice, Quantity)
Product(ProductCode, Dept, UnitofMeasure)

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Primary key in original: (ReceiptID, ProductCode)

C.Step 1

ReceiptID -> CustID
ReceiptID -> DateandTime
ReceiptID, ProductCode -> ActualPrice
ReceiptID, ProductCode -> Quantity
CustID -> CustName
CustID -> MembershipStatus
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(<u>CustID</u>, CustName, MembershipStatus)
Membership(<u>MembershipStatus</u>, Discount)
ReceiptMade(<u>ReceiptID</u>, CustId, DateandTime)
ReceiptItem(<u>ReceiptID</u>, <u>ProductCode</u>, Quantity, ActualPrice)

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