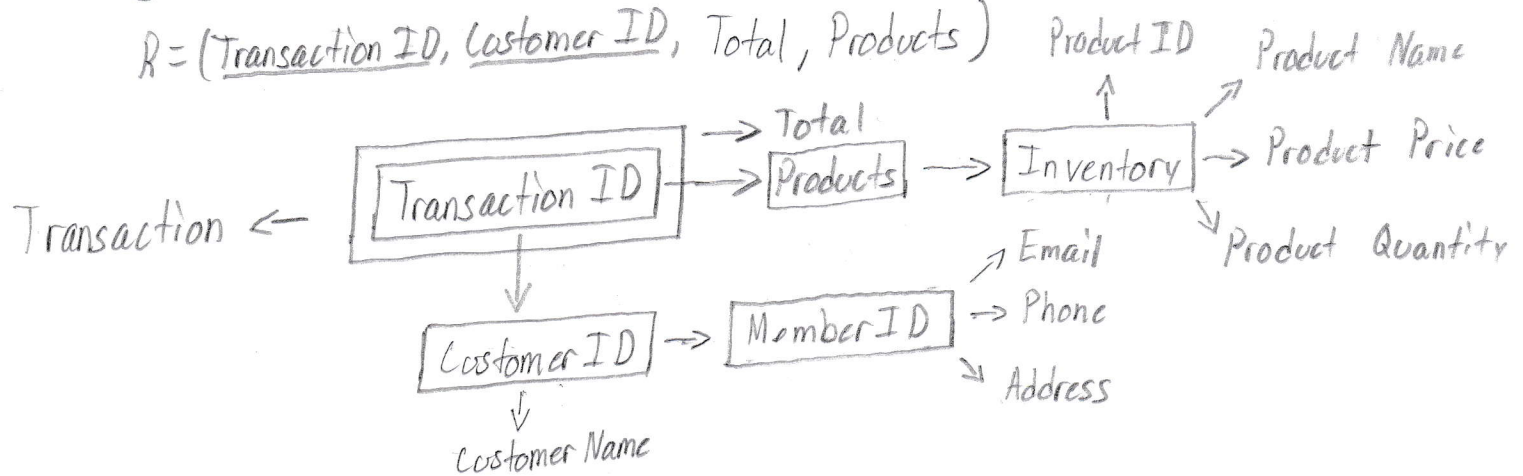


1NF Diagram (Transactions)

$R = (\text{Transaction ID}, \text{Customer ID}, \text{Total}, \text{Products})$



FD: $\text{Transaction ID} \rightarrow \text{Customer ID}, \text{Total}, \text{Products}, \text{Transaction}$

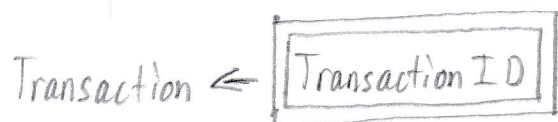
$\text{Customer ID} \rightarrow \text{Customer Name}, \text{Member ID}$

$\text{Member ID} \rightarrow \text{Email}, \text{Phone}, \text{Address}$

$\text{Products} \rightarrow \text{Product ID}, \text{Product Name}, \text{Product Price}, \text{Product Quantity}$

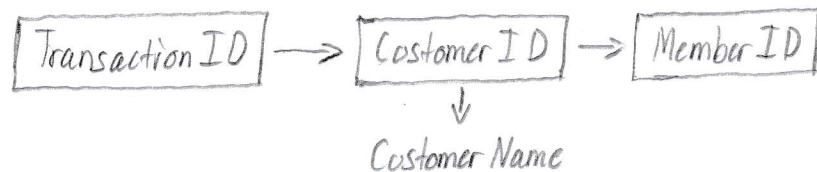
2NF

$R = (\text{Transaction ID}, \text{Transaction})$



FD: $\text{Transaction ID} \rightarrow \text{Transaction}$

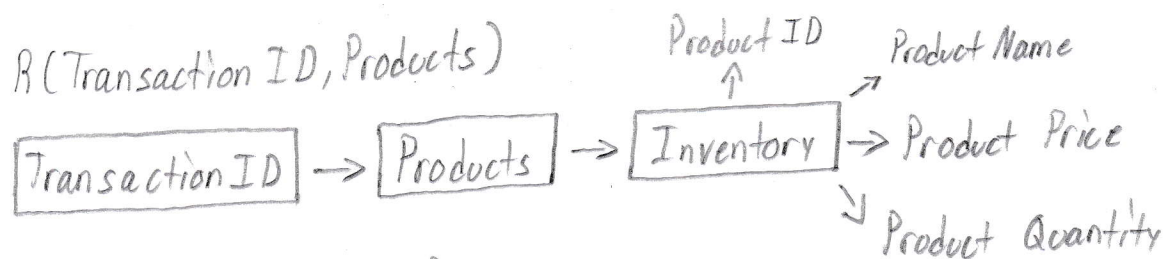
$R(\text{Transaction ID}, \text{Customer ID})$



FD: $\text{Transaction ID} \rightarrow \text{Customer ID}$

$\text{Customer ID} \rightarrow \text{Member ID}, \text{Customer Name}$

$R(\text{Transaction ID}, \text{Products})$



FD: $\text{Transaction ID} \rightarrow \text{Products}$

$\text{Products} \rightarrow \text{Inventory}$

$\text{Inventory} \rightarrow \text{Product ID}, \text{Product Name}, \text{Product Price}, \text{Product Quantity}$