OrderID	CustomerName	EmployeeID	EmployeeName	ItemID	ItemDescription	Quantity	Price	CageCode		

Unnormalized Data (Single Table)

Here we must represent all the data from the form in a single unnormalized table.

We have 5 assumptions:

1) Part Number is Unique: We assume each part number uniquely identifies a part.
2) Customer Number is Unique: We assume each customer number uniquely identifies a customer.
3) Employee Name is Unique: We assume each employee name uniquely identifies an employee.
4) Date and Time are Combined: We'll treat the date and time as a single attribute for simplicity.
5) Cage Code is Unique: We assume each cage code uniquely identifies a storage cage.

Unnormalized Table (UnnormalizedPartsOrder)

ustomer Numbe	**Customer Name**	**Customer Type**	**Date/Time**	**Employee**	**Part Number**	**Name**	**Type**	**Cage Code**	**Quantity Orderec**	**Unit Price**
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10654	Float Control	Plumbing	G413	4	12
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10456	Modulator	Electrical	H433	3	7
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10776	Hose Assembly	Plumbing	G413	7	9
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10657	Float Assembly	Plumbing	G413	5	10

1NF:

Customer Numbe	Customer Name	Customer Type	Date/Time	Employee	Part Number	Name	Type	Cage Code	Quantity Orderec	Unit Price
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10654	Float Control	Plumbing	G413	4	12
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10456	Modulator	Electrical	H433	3	7
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10776	Hose Assembly	Plumbing	G413	7	9
H654587	Jeff Peterson	Consumer	7/1/2024 10:30 A	D. Harrison	10657	Float Assembly	Plumbing	G413	5	10

**Primary Key (PK): There's no single attribute that uniquely identifies each row. We need to use a composite key: Customer Number, Date/Time, and Part Number.

In 2NF, we remove partial dependencies.
Identify Partial Dependencies:
> Customer Name and Customer Type depend only on Customer Number.
> Employee depends only on Date/Time.
> Name, Type, and Cage Code depend only on Part Number.
> Quantity Ordered and Unit Price depend on the entire composite key (Customer Number, Date/Time, Part Number).
Create Separate Tables:

Customer: Customer Number, Customer Name, Customer Type
EmployeeTime: Date/Time, Employee
Part: Part Number, Name, Type, Cage Code
Order: Customer Number, Date/Time, Part Number, Quantity Ordered, Unit Price

2NF Tables:

Customer Table				EmployeeTime			Part			
Customer Numb	Customer Name	Customer Type		**Date/Time**	Employee		**PartNumber**	Name	Type	Cage Code
H654587	Jeff Peterson	Consumer		7/1/2024 10:30 A	D. Harrison		10654	Float Control	Plumbing	G413
							10456	Modulator	Electrical	H433
							10776	Hose Assembly	Plumbing	G413
							10657	Float Assembly	Plumbing	G413
Order										
Customer Numb	**Date/Time**	**PartNumber**	Quantity Orderec	Unit Price						
H654587	7/1/2024 10:30 A	10654	4	12						
H654587	7/1/2024 10:30 A	10456	3	7						
H654587	7/1/2024 10:30 A	10776	7	9						
H654587	7/1/2024 10:30 A	10657	5	10						