DBS211 Winter 2020

Lab 10 Submission:

For the following User View, determine the 1, 2 and 3NF and hand in this page to your instructor. The UNF relation has been provided.

Premiere Corporation Order Detail Report

Order Number	Order Date	Cust Number	Cust Last Name	Part Number	Part Desc	Qnty Ordered	Quoted Price
12489	2016-09-02 124	124	Adams	AX12	Iron	11	14.95
12491	2016-09-02 311	311	Charles	BT04	GasGrill	3	440.00
				BZ66	Washer	1	399.99
				CX11	MiniBlender	1	11.98
12494	2016-09-04	315	Daniels	CB03	Bike	4	279.96
12495	2016-09-04	256	Samuels	CX11	MiniBlender	2	23.96
12498	2016-09-05	522	Nelson	AZ52	Dartboard	2	12.96
				BA74	Basketbal	4	24.96
12500	2016-09-05	124	Adams	BT04	GasGrill	1	149.99
12504	2016-09-05	522	Nelson	CZ81	Treadmill	2	325.98

UNF:

Order [OrderNo, OrderDate, CustNo, CustLastName, (PartNo, PartDesc,QntyOrd, QuotedPrice)]

1NF:

OrderNo -> OrderDate, CustNo, CustLastName, QntyOdr, QuatedPrice

CustNo -> CustLastName

PartNo -> PartDesc

QtyOrd -> QuotedPrice

OrderNo, PartNo -> OrderDate, CustNo, CustLastName, PartDesc, QtyOrd, QuotedPrice

OrderNo, PartNo is the composite key.

Key attributes: OrderNo, PartNo

Non-key attributes: OrderDate, CustNo, CustName, PartDesc, QtyOrd, QuotedPrice

Order[OrderNo, PartNo, OrderDate, CustNo, CustName, PartDesc, QtyOrd, QuotedPrice]

2NF:

OrderNo -> OrderDate, CustNo, CustLastName, QntyOdr, QuatedPrice

PartNo -> PartDesc

The above functional dependencies violate 2NF

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OrderDetail [OrderNo(FK1), PartNo(FK2)]
Order [OrderNo, OrderDate, CustNo, CustLastName, QntyOdr, QuatedPrice]
Part [PartNo, PartDesc]

3NF:

CustNo -> CustLastName
The above functional dependencies violate 2NF

OrderDetail [OrderNo(FK1), PartNo(FK2)]
Order [OrderNo, OrderDate, CustNo(FK), QntyOdr, QuatedPrice]
Part [PartNo, PartDesc]
Customer [CustNo, CustLastName]