

Lab 10– Normalization

(2NF, 3NF)

Objective:

Students will learn:

- To continue the **normalization** of user views from **1NF** to **2NF** and **3NF**
- How to identify and remove **partial dependencies**
- How to identify and remove **transitive dependencies**

Submission:

*Save your lab file as a PDF file. You need to submit a single **PDF** file for this lab.*

Your name and Oracle ID MUST be in the PDF file or you will receive a mark of zero.

The name of the file must be as follow:

L10_UserID_LASTNAME.pdf

Definitions:

Definition: A relation is in 1NF if it contains no multi-valued dependencies (also known as repeating groups).

Definition: A relation is in 2NF if it is in 1NF and it contains no Partial Dependencies.

Definition: A Partial Dependency occurs when a non-key attribute(s) is dependent on (or is determined by) a part of a composite primary key.

Definition: A relation is in 3NF if it is in 2NF and it contains no Transitive Dependencies.

Definition: A Transitive Dependency occurs when a non-key attribute (s) is dependent on (or is determined by) another non-key attribute.

Name: Davinder Verma

ID: 121802201

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	Qty 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, CustLname, (PartNo, PartDesc, QtyOrd, Price)]

1NF:

Order [OrderNo, PartNo, OrderDate, CustNo, CustLname, PartDesc, QtyOrd, Price]

2NF:

ORDER [OrderNo(PK), CustNo(FK), OrderDate, CustNo, CustLname]

PART [PartNo, PartDesc, Price]

ORDER_PART [OrderNo(PK,FK), PartNo(PK,FK), QtyOrd]

3NF:

ORDER [OrderNo(PK), OrderDate, CustNo(FK)]

DBS211

CUSTOMER [**CustNo**, CustLname]

PART [**PartNo**, PartDesc, Price]