

# Example ClientRental Table

cNo	cName	pNo	rentStart	rentFinish	rent	oNo	ownName
CR76	John Kay	PG4	1-Jul-07	31-Aug-08	350	CO40	Tina Murphy
CR76	John Kay	PG16	1-Sep-08	1-Sep-09	450	CO93	Tony Shaw
CR56	Aline Stewart	PG4	1-Sep-06	1-June-07	350	CO40	Tina Murphy
CR56	Aline Stewart	PG36	10-Oct-07	1-Dec-08	375	CO93	Tony Shaw
CR56	Aline Stewart	PG16	1-Nov-10	10-Aug-10	450	CO93	Tony Shaw

# What is the primary key?

In this example, we are assuming that a client rents a given property only once and cannot rent more than one property at a time.

clientNo, propertyNo

# Violations of 2NF

- Look for partial dependencies on the primary key:

Fd1:

clientNo, propertyNo ->rentStart, rentFinish,... (PK)

Fd2:

clientNo->cName (Partial dependency)

Fd3:

propertyNo->rent, ownerNo, ownerName (partial dependency)

client

# Modified Tables

cNo	cName
CR76	John Kay
CR56	Aline Stewart

pNo	rent	oNo	ownName
PG4	350	CO40	Tina Murphy
PG16	450	CO93	Tony Shaw
PG36	375	CO93	Tony Shaw

cNo	pNo	rentStart	rentFinish
CR76	PG4	1-Jul-07	31-Aug-08
CR76	PG1 6	1-Sep-08	1-Sep-09
CR56	PG4	1-Sep-06	1-June-07
CR56	PG3 6	10-Oct- 07	1-Dec-08
CR56	PG1 6	1-Nov-10	10-Aug-10

PropertyOwner

Rental

# Violation of 3NF

## PropertyOwner

pNo-> rent, ownerNo, ownName (primary key)

ownerNo->ownName (ownName Transitively dependent on owner number)

# Modified Tables

<b>pNo</b>	<b>rent</b>	<b>oNo</b>
PG4	350	CO40
PG16	450	CO93
PG36	375	CO93

<b>oNo</b>	<b>ownName</b>
CO40	Tina Murphy
CO93	Tony Shaw

PropertyForRent



Owner

