Lab 11 Submission   **NAME: Olga Rudina**

Produce the final merged 3NF relations for the following two user views:

User View #1

HEALTH HISTORY REPORT

PET ID	PET NAME	PET TYPE	PET AGE	OWNER	VISIT DATE	PROCEDURE	DOCTOR
246	ROVER	DOG	12	SAM COOK	JAN 13/2013	01 – DOG RABIES VACCINATION	T.CANINE
						07 - DE-WORMING	
						25 – DOG ANNUAL CHECKUP	
341	MORRIS	CAT	4	SAM COOK	AUG 13/2012	02 – CAT RABIES VACCINATION	T.CANINE
					JAN 13/2013	02 – CAT RABIES VACCINATION	J.KATZ
					MAR 10/2013	10 - EXAMINE and TREAT WOUND	R.BYRD
						05 – CAT HEART WORM TEST	J.KATZ
342	SPOT	DOG	2	TERRY KIM	JAN 13/2013	08 - TETANUS VACCINATION	R. BYRD
						25 – DOG ANNUAL CHECKUP	
					MAR 10/2013	06 – DOG HEART WORM TEST	
519	TWEEDY	BIRD	2	TERRY KIM	FEB 26/2013	27 - ANNUAL CHECK UP	J.KATZ
						12 - EYE WASH	

Start with this UNF:

UNF: [PETID, PET_NAME, PET_TYPE, PET_AGE, CLIENT_ID, CLIENT_NAME, { **VISIT_DATE,** {**PROC#**, PROCEDURE, DOC#, DOCTOR_NAME } }]

1NF:

VISIT_INFO   (**PETID   ,   VISIT_DATE,   PROC#,** PET_NAME, PET_TYPE, PET_AGE, CLIENT_ID, CLIENT_NAME, PROCEDURE, DOC#, DOCTOR_NAME)

2NF:

PET [**PETID**, PET_NAME, PET_TYPE, PET_AGE, CLIENT_ID, CLIENT_NAME]
VISIT_INFO (**PETID , VISIT_DATE, PROC#,** DOC#, DOCTOR_NAME)
PROCEDURE (**PROC#,** PROCEDURE)

3NF:

PET (**PETID**, PET_NAME, PET_TYPE, PET_AGE, CLIENT_ID(FK))
VISIT_INFO (**PETID , VISIT_DATE, PROC#,** DOC#(FK))
PROCEDURE (**PROC#,** PROCEDURE)
CLIENT (**CLIENT_ID**, CLIENT_NAME)
DOCTOR (**DOC#,** DOCTOR_NAME)

User View_2

INVOICE

HILLTOP ANIMAL HOSPITAL   DATE: JAN 13/2013
INVOICE # 987

MR. RICHARD COOK
123 THIS STREET
MY CITY, ONTARIO
Z5Z 6G6

PET	DOCTOR#	PROCEDURE	AMOUNT
ROVER	12	DOG RABIES VACCINATION	30.00
		DE-WORMING	59.00
		DOG ANNUAL CHECKUP	45.00
MORRIS	23	CAT RABIES VACCINATION	24.00

TOTAL	158.00
TAX (13%)	20.54
AMOUNT OWING	178.54

UNF: (**INVOICE#**, HOSPITAL_NAME, HOSPITAL_ADDR, INV_DATE, CLIENT_ID, CLIENT_NAME, CLIENT_ADDRESS, {**PET_ID**, PET_NAME, DOCTOR#, {**PROC#**, PROCEDURE, COST}})

1NF: INVOICE (**INVOICE#, PET_ID, PROC#,** HOSPITAL_NAME, HOSPITAL_ADDR, INV_DATE, CLIENT_ID, CLIENT_NAME, CLIENT _ADDRESS, PET_NAME, DOCTOR#, PROCEDURE, COST)

2NF:

INVOICE (**INVOICE#,** HOSPITAL_NAME, HOSPITAL_ADDR, INV_DATE, CLIENT_ID, CLIENT_NAME, CLIENT _ADDRESS)

VISIT_INFO(**INVOICE#**, **PET_ID, PROC#,** COST)

PET(**PET_ID**, PET_NAME, DOCTOR#)

PROCEDURE (**PROC#,** PROCEDURE)

3NF:

INVOICE (**INVOICE#,** HOSPITAL_NAME, INV_DATE, CLIENT_ID (FK))

VISIT_INFO(**INVOICE#**, **PET_ID, PROC#,** COST)

PET(**PET_ID**, PET_NAME, DOCTOR#)

PROCEDURE (**PROC#,** PROCEDURE)

CLIENT(**CLIENT_ID**, CLIENT_NAME, CLIENT _ADDRESS)

Merged:

PET (**PETID**, PET_NAME, PET_TYPE, PET_AGE, CLIENT_ID(FK))

CLIENT(**CLIENT_ID**, CLIENT_NAME, CLIENT _ADDRESS)

DOCTOR (**DOC#,** DOCTOR_NAME)

VISIT_INFO (**PETID , VISIT_DATE, PROC#,** DOC#(FK))

PROCEDURE (**PROC#,** PROCEDURE)

INVOICE (**INVOICE#,** HOSPITAL_NAME, INV_DATE, CLIENT_ID (FK))

INVOICE_DET(**INVOICE#**, **PET_ID, PROC#,** COST)