

Code question 1: Please show the tables in their 1NF, 2NF, and 3NF. Your answer should be shown in table format as well. No need to code this. (Hint: adding key columns such as “owner_id” might be helpful with the normalization.)

1NF

VISIT TABLE						
PET_ID	PET_NAME	PET_TYPE	PET_AGE	OWNER	VISIT_DATE	PROCEDURE
246	ROVER	DOG	12	SAM COOK	JAN 13/2002	01 - RABIES VACCINATION
246	ROVER	DOG	12	SAM COOK	MAR 27/2002	10 - EXAMINE and TREAT WOUND
246	ROVER	DOG	12	SAM COOK	APR 02/2002	05 - HEART WORM TEST
298	SPOT	DOG	2	TERRY KIM	JAN 21/2002	08 - TETANUS VACCINATION
298	SPOT	DOG	2	TERRY KIM	MAR 10/2002	05 - HEART WORM TEST
341	MORRIS	CAT	4	SAM COOK	JAN 23/2001	01 - RABIES VACCINATION
341	MORRIS	CAT	4	SAM COOK	JAN 13/2002	01 - RABIES VACCINATION
519	TWEEDY	BIRD	2	TERRY KIM	APR 30/2002	20 - ANNUAL CHECK UP
519	TWEEDY	BIRD	2	TERRY KIM	APR 30/2002	12 - EYE WASH

2NF

PET TABLE				
PET_ID	PET_NAME	PET_TYPE	PET_AGE	OWNER
246	ROVER	DOG	12	SAM COOK
298	SPOT	DOG	2	TERRY KIM
341	MORRIS	CAT	4	SAM COOK
519	TWEEDY	BIRD	2	TERRY KIM

VISIT TABLE			
VISIT_ID	VISIT_DATE	PROCEDURE	PET_ID
1	JAN 13/2002	01 - RABIES VACCINATION	246
2	MAR 27/2002	10 - EXAMINE and TREAT WOUND	246
3	APR 02/2002	05 - HEART WORM TEST	246
4	JAN 21/2002	08 - TETANUS VACCINATION	298
5	MAR 10/2002	05 - HEART WORM TEST	298
6	JAN 23/2001	01 - RABIES VACCINATION	341
7	JAN 13/2002	01 - RABIES VACCINATION	341
8	APR 30/2002	20 - ANNUAL CHECK UP	519
9	APR 30/2002	12 - EYE WASH	519

3NF

PET_OWNER TABLE	
PET_ID	OWNER_ID
246	1
298	2
341	1
519	2

PET TABLE			
ID	NAME	TYPE	AGE
246	ROVER	DOG	12
298	SPOT	DOG	2
341	MORRIS	CAT	4
519	TWEEDY	BIRD	2

OWNER TABLE	
ID	NAME
1	SAM COOK
2	TERRY KIM

VISIT TABLE			
ID	PET_ID	PROCEDURE_ID	DATE
1	246	1	JAN 13/2002
2	246	10	MAR 27/2002
3	246	5	APR 02/2002
4	298	8	JAN 21/2002
5	298	5	MAR 10/2002
6	341	1	JAN 23/2001
7	341	1	JAN 13/2002
8	519	20	APR 30/2002
9	519	12	APR 30/2002

PROCEDURE TABLE	
ID	PROCEDURE
1	RABIES VACCINATION
10	EXAMINE and TREAT WOUND
5	HEART WORM TEST
8	TETANUS VACCINATION
20	ANNUAL CHECK UP
12	EYE WASH