

1NF:

STUDENT

student_id	name	age	pet_name	breed	type
102	Heather Jones	8	Thomas	Siamese	Cat
102	Heather Jones	8	Peter	Jersey Wooly	Rabbit
105	Rachel Smith	10	Fluff	Persian	Cat
105	Rachel Smith	10	Rex	Collie	Dog
101	Jimmy Johnson	11	Baxter	Hound	Dog
101	Jimmy Johnson	11	Mandy	Siamese	Cat
104	Lola Jones	10	Thomas	Siamese	Cat
104	Lola Jones	10	Peter	Jersey Wooly	Rabbit
106	Peter Allen	9	Baxter	Beagle	Dog
106	Peter Allen	9	Ralph	Beagle	Dog
103	Lilly Sinclair	11	Rex	Bengal	Cat
103	Lilly Sinclair	11	Max	Siamese	Cat

STUDENT(student_id, name, age, pet_name, breed, type)

2NF:

STUDENT		
<u>student_id</u>	name	age
102	Heather Jones	8
105	Rachel Smith	10
101	Jimmy Johnson	11
104	Lola Jones	10
106	Peter Allen	9
103	Lilly Sinclair	11

STUDENT_PET	
<u>student_id</u>	<u>pet_id</u>
102	1
102	2
105	3
104	4
101	5
101	6
104	1
104	2
106	7

106	8
103	9
103	10

PET			
<u>pet_id</u>	pet_name	breed	type
1	Thomas	Siamese	Cat
2	Peter	Jersey Wooly	Rabbit
3	Fluff	Persian	Cat
4	Rex	Collie	Dog
5	Baxter	Hound	Dog
6	Mandy	Siamese	Cat
7	Thomas	Siamese	Cat
8	Peter	Jersey Wooly	Rabbit
9	Baxter	Beagle	Dog
10	Ralph	Beagle	Dog
11	Rex	Bengal	Cat
12	Max	Siamese	Cat

STUDENT(student_id, name, age)

PET(pet_id, pet_name, breed, type)

STUDENT_PET(student_id, pet_id,)

3NF:

STUDENT		
<u>student_id</u>	name	age
102	Heather Jones	8
105	Rachel Smith	10
101	Jimmy Johnson	11
104	Lola Jones	10
106	Peter Allen	9
103	Lilly Sinclair	11

PET		
<u>pet_id</u>	pet_name	breed_id
1	Thomas	1
2	Peter	2
3	Fluff	3
4	Rex	4

5	Baxter	5
6	Mandy	1
7	Baxter	6
8	Ralph	7
9	Rex	7
10	Max	1

STUDENT_PET	
<u>student_id</u>	<u>pet_id</u>
102	1
102	2
105	3
104	4
101	5
101	6
104	1
104	2
106	7
106	8
103	9
103	10

BREED		
<u>breed_id</u>	breed	type_id
1	Siamese	1
2	Jersey Wooly	2
3	Persian	1
4	Collie	3
5	Hound	3
6	Beagle	3
7	Bengal	1

TYPE	
<u>type_id</u>	<u>type</u>
1	Cat
2	Rabbit
3	Dog

STUDENT(student_id, name, age)

PET(pet_id, pet_name, breed_id)

FK breed_id -> BREED

STUDENT_PET(student_id, pet_id,)

FK student_id -> STUDENT

FK pet_id -> PET

BREED(breed_id, breed, type_id)

FK type_id -> TYPE

TYPE(type_id, type)