

Name: _____

QUIZ 4 - ICS 321 Fall 2017

Today we finished covering Chapter 3. By now we should have a firm understanding of relations, keys and foreign keys.

1. Which relvars are equal?

A=

<u>SNO</u>	SNAME	STATUS	CITY
S1	Smith	20	London
S2	Jones	10	Paris
S3	Blake	30	Paris
S4	Clark	20	London
S5	Adams	30	Athens

B=

CITY	<u>SNO</u>	STATUS	SNAME
Paris	S2	10	Jones
Athens	S5	30	Adams
Berlin	S3	30	Blake
London	S1	20	Smith
London	S4	20	Clark

C=

SNAME	CITY	<u>SNO</u>	STATUS
Smith	London	S1	20
Jones	Paris	S2	10
Blake	Berlin	S3	30
Clark	London	S4	20
Adams	Athens	S5	30

D=

SNAME	CITY	<u>SNO</u>	STATUS
Jones	Paris	S2	10
Adams	Athens	S5	30
Blake	Paris	S3	30
Smith	London	S1	20
Clark	London	S4	20

2. Circle and identify all the reasons why the table at the right is not a relation.

A white cell indicates an empty string.

A gray cell indicates the value is unknown or does not exist.

<u>SNO</u>	CITY	SNAME		CITY	STATUS
S2	Paris	Jones	Red	Moscow	10
S3		Blake	Blue	Paris	30
S5	Athens	Adams		Berlin	30
S2	Paris	Jones	Red	Moscow	10
S1	Rome	Wong	Green	London	20,30

(Over please ...)

3. In the relation on the right, you decide to separate the city and state into a separate relation because the city and state can be determined by the zipcode.

<u>pk</u>	<u>TMK</u>	<u>StreetAddress</u>	<u>City</u>	<u>State</u>	<u>Zip</u>
1	1390920	1180 Mokuhano St	Honolulu	HI	96825
2	1390820	1163 Mokuhano St	Honolulu	HI	96825
3	1470590	47-632 Uakea Pl	Kaneohe	HI	96744
4	1390820	1161 Mokuhano St	Honolulu	HI	96825
5	1370090	710 W Hind Dr	Honolulu	HI	96821

Draw the new relation to be added below.

Underline the primary key and circle the foreign key.

Cross out the attributes (columns) in the above relation no longer needed.