

CHAPTER 2

DISCUSSIONS 1

Discussion 2-1

- A. Define *super key*, *candidate key*, and *primary key*.
- B. Why do you think “key”, without any qualifier, is meant to be candidate key instead of super key?

Discussion 2-2

(Exercise 2.2)

- Consider the foreign key constraint from the *dept_name* attr. of *instructor* to the *department* relation. Give examples of inserts and deletes to these relations, which can cause a violation of the foreign key constraint.

<i>ID</i>	<i>name</i>	<i>dept_name</i>	<i>salary</i>
22222	Einstein	Physics	95000
12121	Wu	Finance	90000
32343	El Said	History	60000
45565	Katz	Comp. Sci.	75000
98345	Kim	Elec. Eng.	80000
76766	Crick	Biology	72000
10101	Srinivasan	Comp. Sci.	65000
58583	Califieri	History	62000
83821	Brandt	Comp. Sci.	92000
15151	Mozart	Music	40000
33456	Gold	Physics	87000
76543	Singh	Finance	80000

instructor

<i>dept_name</i>	<i>building</i>	<i>budget</i>
Biology	Watson	90000
Comp. Sci.	Taylor	100000
Elec. Eng.	Taylor	85000
Finance	Painter	120000
History	Painter	50000
Music	Packard	80000
Physics	Watson	70000

department

Discussion 2-3

(Exercise 2.4)

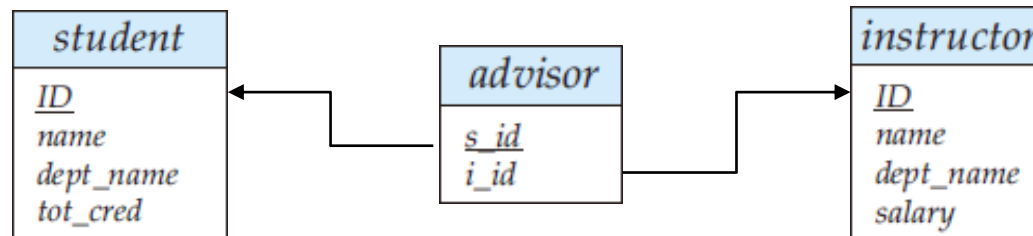
- In the instance of *instructor* shown below, no two instructors have the same name. From this, can we conclude that *name* can be used as a super key (or primary key) of *instructor*?

<i>instructor</i>	<i>ID</i>	<i>name</i>	<i>dept_name</i>	<i>salary</i>
	22222	Einstein	Physics	95000
	12121	Wu	Finance	90000
	32343	El Said	History	60000
	45565	Katz	Comp. Sci.	75000
	98345	Kim	Elec. Eng.	80000
	76766	Crick	Biology	72000
	10101	Srinivasan	Comp. Sci.	65000
	58583	Califieri	History	62000
	83821	Brandt	Comp. Sci.	92000
	15151	Mozart	Music	40000
	33456	Gold	Physics	87000
	76543	Singh	Finance	80000

Discussion 2-4

(Exercise 2.10)

- Consider the *advisor* relation shown below, with *s_id* as the primary key of *advisor*. Suppose a student can have more than one advisor. Then, would *s_id* still be a primary key of the *advisor* relation? If not, what should the primary key of *advisor* be?



Discussion 2-5

- 어느 편의점의 판매 기록 table은 어떻게 생겨야 할까?
- 이 table의 primary key는?
- 이 table과 연관된 다른 table이 있다면 어떤 것이 있을까?
(최소 세 개)

Discussion 2-6

- 하나의 편의점이 아니라 편의점 체인의 본부에 전체 편의점 판매 기록이 하나의 table에 쌓인다면 추가되어야 할 column 및 관련 table은?

Discussion 2-7

- 이 table들의 schema diagram을 그리시오.