

# CHAPTER 8

# DISCUSSIONS 1

# Discussion 8-1

List all meaningful\* FDs for the following relation schema *Student*.

*Student*(*ID*, *Name*, *Address*, *Sex*, *Age*, *Dept*, *Dept\_office*, *Dept\_Chair*,  
*College*, *Dean*, *AdvisorID*, *AdvName*, *AdvDept*)

\* You may omit trivial and redundant FDs.

## Discussion 8-2

Explain how functional dependencies can be used to indicate the following:

- a) a 1-to-1 relationship exists between students and advisors.
- b) a many-to-1 relationship exists between students and advisors.

*Student(ID, Name, Address, Sex, Age, Dept, AdvisorID)*

## Discussion 8-3

Explain/Define the concept of *functional dependency*.