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Examples from 4notes15

Example 1

MovieStar (name,address,gender,birthdate)

How do we express FD: name -> address

- (MovieStar (MS1) $\bowtie_{MS1.name=MS2.name\,AND\,MS1.address<>MS2.address}$ MovieStar (MS2)) = $\emptyset$

Example 2

Student(ID, name, address, GPA, SAT)
Campus(location, enrollment, rank)
Apply(ID, location, date, major, decision)

An application must be tied to an existing student.

- π_{ID} (Apply) - π_{ID} (Student) = $\emptyset$
- π_{ID} (Apply) $\subseteq \pi_{ID}$ (Student)

A campus must have non-zero enrollment.

- $\sigma_{enrollment=0}$ (Campus) = $\emptyset$