

3) A deleting means that all the related data in dependent table should also be deleted. That is why we cannot delete a tuple (Comp. science, Tailor, 1000) from the department relation, because we have other student or instructor tuples, where in dept_name occurs Physics.

Inserting of a data to the table should occur when a related data already exists in the base table. So we cannot insert tuple (12345, somebody, LAW, 123459\$), since we haven't a Law department.

4) In employee relation, a primary key is a person_name(or if exists, ID, because the name of a person can be repeated).

In works table, a primary key is also a person_name(or if exists, ID, because the name of a person (non unique) can be repeated).

In company relation, company_name is a primary key.

$$\bowtie \forall \wedge \rightarrow \sigma \cap U = X \cap \neq \square$$