

Data sometimes is not clean or is denormalized, so we use normalization to organize it

1-first normal form:

When: table contains multivalued attribute(phone numbers).

Solution: by separating phone number into a new table and the primary key of student table will be set as a foreign key in the new table.

2-2NF:

When:there are attributes that depends on some of keys not all.

Solution: create a new table and put the attributes that are partial dependency and make that part of the key the primary key of the new table.

3-3NF:

When:non key attribute depends on non key attribute.

Solution:

Create new table and then move these attributes