

3 type of Normalizations are 1NF, 2NF, 3NF

1NF: (i) Only one primary key
(ii) No multivalued attribute

(iii) Same column types

(iv) Order of row & columns don't matter

For 'Department' table:

→ Department_id is the primary key

Columns are Department_name, Manager_id & Location_id

Here no multivalued exists & column type are same.

2NF: (i) The table is in 1NF form
(ii) No partial dependency

For 'Department table'

the table is already in 1NF form means
~~one~~ one primary key

Partial dependency: one non prime attribute is
dependent on a prime attribute

→ Department_name is dependent on Department_id

- 3NF:
- (i) It should be ~~in~~ in 2NF
 - (ii) There should not be any transitive dependency

Transitive dependency: if one non prime attribute is dependent on another ~~non~~ non prime attribute

In department table there is no transitive dependency