DA PROJECT PHASE-3
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CHANGES:

1. We added a new attribute i.e. "ID" to the WORKS_ON relationship between factory and consignment.

2. We converted "owner" atrribute of factory into a relationship between factory and person.

NORMAL FORMS:

Well if we simply make relational-model according to our ER diagram then it will be already in third normal form , as :-
1. all columns contain atomic value, have data of same datatype , have unique column names ,
2. there is no particular order in which rows need to be inserted ,
3. there are no atrributes which are dependent on partial key atrributes ,
4. there are no key attributes which are derivable from non-key attribute.

So the only improvement that we can bring in our relational-model is removal of NULL values from EMPLOYEE tuples. This can be done by splitting EMPLOYEE relation into two relations in which one is for employee working in some shop and the other one is for employee working in some factory.

Note: the first image on next page corresponds to the model without making any changes. And the second image is the one where we made changes in EMPLOYEE relation to remove null values from tuples.

SHOP

State_code	Pan_card_no	Random_no	Name	Location

TRACKS_INFO

CAAD	Name	S_location	F_email

PERSON

Aadhar_no	Name	Address

EMPLOYEE

Fk_aad_no	Fk_f	Fk_s	Sup_aad

CUSTOMERS

Fk_aad_no	Fk_insur

INSURANCE_COMPANY

Costumer_count	Name

FACTORY

Location	Fk_owner_aad	E-mail

CONSIGNMENT

Fk_works_on_id	Year	Quantity

WORKS_ON

Id	Fk_email

COMMODITY

Name

SUPPLY

E-mail	Name	Sh_loc

INSURED_VIA

E_aad	F_email	I_name

SHOP

State_code	Pan_card_no	Random_no	Name	Location

TRACKS_INFO

CAAD	Name	S_location	F_email

PERSON

Aadhar_no	Name	Address

S_EMPLOYEE

Fk_aad_no	Fk_s	Sup_aad

F_EMLOYEE

Fk_aad_no	Fk_f	Sup_aad

CUSTOMERS

Fk_aad_no	Fk_insur

INSURANCE_COMPANY

Costumer_count	Name

FACTORY

Location	Fk_owner_aad	E-mail

CONSIGNMENT

Fk_works_on_id	Year	Quantity

WORKS_ON

Id	Fk_email

COMMODITY

Name

SUPPLY

E-mail	Name	Sh_loc

INSURED_VIA

E_aad	F_email	I_name