

DBMS Deliverable -2

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Assumption: Every person has a unique email id.

- 1) CUSTOMER(Patient_ID,Name,Address,Contact_No,Email)
 - a) Patient_ID -> Name,Address,Contact_No.,Email
 - b) Name,Contact_No. -> Patient_ID,Address,Email
- 2) DRUG_MANUFACTURER(Company_ID,Name,Company_email)
 - a) Company_ID -> Name,Company_email
 - b) Company_email -> Company_ID,Name
- 3) DOCTOR(Doctor_ID,Contact_No,Name,Specialization,Hospital)
 - a) Doctor_ID -> Contact_No,Name,Specialization
 - b) Name,Contact_No. -> Doctor_ID,Specialization
 - c) Hospital,Specialisation -> Doctor_ID,Contact_No,Name
- 4) SALE_TRANSCATION(Sale_ID,Date,Employee_ID)
 - a) Sale_ID -> Date,Employee_ID
- 5) PURCHASE(Date,Purchase_ID)
 - a) Purchase_ID -> Date
- 6) SELLS(Sale_ID,Drug_ID,Patient_ID,Quantity)
 - a) Sale_ID,Drug_ID,Patient_ID -> Quantity
- 7) PRESCRIBES(Patient_ID,Doctor_ID,Drug_ID)
 - a) Only trivial FD as all attributes form primary key
- 8) DRUG(Location,Cost_Price,Stock,Drug_ID,Name,Discount,MRP,Company_ID,Expiry,Type)
 - a) Drug_ID -> Location,Cost_Price,Stock,Name,Discount,MRP,Company_ID,Expiry
 - b) Name,MRP -> Drug_ID,Location,Cost_Price,Stock,Discount,Company_ID,Expiry
 - c) Name,Cost_Price -> Drug_ID,Location,MRP,Stock,Discount,Company_ID,Expiry
 - d) Type -> Shelf
- 9) SUPPLIES(Quantity,Purchase_ID,Distributor_ID,Drug_ID)
 - a) Distributor_ID,Drug_ID,Purchase_ID -> Quantity
- 10)DISTRIBUTOR(Distributor_ID,Contact_No,Email)
 - a) Distributor_ID -> Contact_No,Email

- b) Email -> Distributor_ID, Contact_No
- 11) EMPLOYEE(Employee_ID, Name, Contact_No, Email, Position, Salary)
 - a) Employee_ID -> Name, Contact_No, Email, Position, Salary
 - b) Email -> Employee_ID, Name, Contact_No, Position, Salary
 - c) Position -> Salary

3-NF

1. CUSTOMER(Patient_ID, Name, Address, Contact_No, Email)
Already in 3NF
2. DRUG_MANUFACTURER(Company_ID, Name, Company_email)
Already in 3NF
3. DOCTOR(Doctor_ID, Contact_No, Name, Specialization, Hospital)
Already in 3NF
4. SALE_TRANSACTION(Sale_ID, Date, Employee_ID)
Already in 3NF
5. PURCHASE(Date, Purchase_ID)
Already in 3NF
6. SELLS(Sale_ID, Drug_ID, Patient_ID, Quantity)
Already in 3NF
7. PRESCRIBES(Patient_ID, Doctor_ID, Drug_ID)
 - a. Only trivial FD as all attributes form primary key
8. DRUG(Location, Cost_Price, Stock, Drug_ID, Name, Discount, MRP, Company_ID, Expiry, Type)
 - DRUG0(Type, Location)
Type -> Location
 - DRUG1(Cost_Price, Stock, Drug_ID, Name, Discount, MRP, Company_ID, Expiry, Type)
 - A. Drug_ID -> Location, Cost_Price, Stock, Name, Discount, MRP, Company_ID, Expiry
 - B. Name, MRP -> Drug_ID, Location, Cost_Price, Stock, Discount, Company_ID, Expiry
 - C. Name, Cost_Price -> Drug_ID, Location, MRP, Stock, Discount, Company_ID, Expiry

9. SUPPLIES(Quantity,Purchase_ID,Distributor_ID,Drug_ID)

Already in 3NF

10. DISTRIBUTOR(Distributor_ID, Contact_No, Email)

Already in 3NF

11. EMPLOYEE(Employee_ID, Name, Contact_No, Email, Position, Salary)

EMPLOYEE0(Salary, Position)

Position->Salary

EMPLOYEE2(Employee_ID, Name, Contact_No, Email, Position)

1. Employee_ID -> Name, Contact_No, Email, Position, Salary

2. Email -> Employee_ID, Name, Contact_No, Position, Salary