DATABASE MANAGEMENT PROJECT

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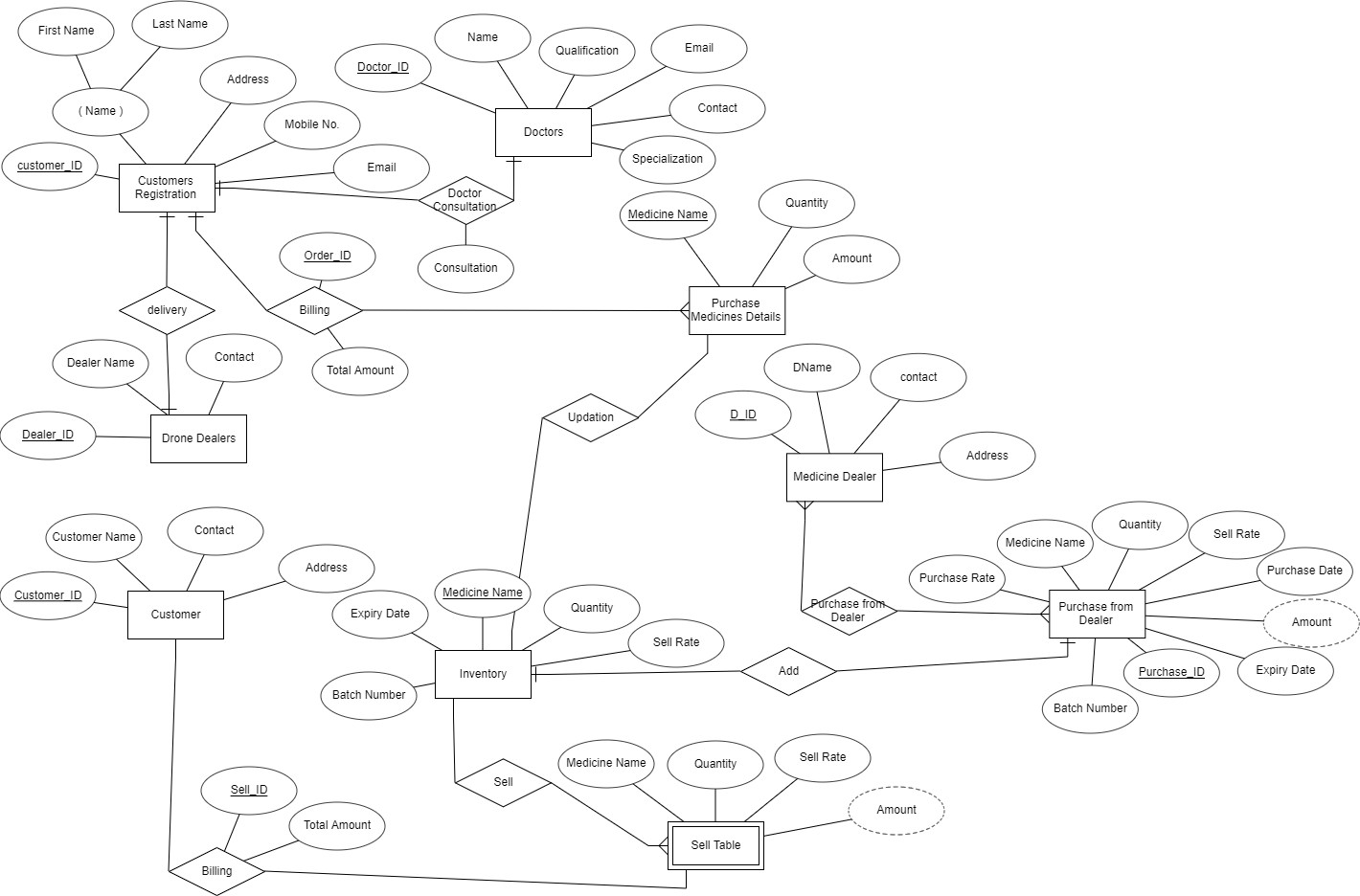
Topic: ADVANCED PHARMACY MANAGEMENT SYSTEM

# Problem Statement: -

As the Pandemic was there, it is not safe to buy medicines by going to the pharmacy shop at this time. So, we also provide online service to order medicines and trying to deliver them Using Drones So That Human contact can be Reduced. Along with that Consultation with doctors is also very difficult at this time. Therefore, we provide service to Consult with the doctors online.

Design A Data-Base to Manage the **Advanced Pharmacy system** with these Additional services?

# ER Diagram:



ASSUMPTIONS:-

1. Customer\_Registration table is used to store the data of Online customers.
2. Customer Table is used to store the data of Offline Customers.
3. Inventory table is used to store the data of Currently Available Medicines with their Quantity.

# Schema:-

DOCTOR(Doctor\_ID(PK),Name,Email,Contact,Specialization,Qualification,customer\_ID(FK)) Customer\_Registration(customer\_ID(PK),FirstName,LastName,Address,Mobile No. , Email) Purchase\_Medicines\_Details(MedicineName(PK),Quantity,Amount,cutomer\_ID(FK),order\_ID(FK),Me dicine Name(FK))

Billing(order\_ID,TotalAmount,customer\_ID(FK))

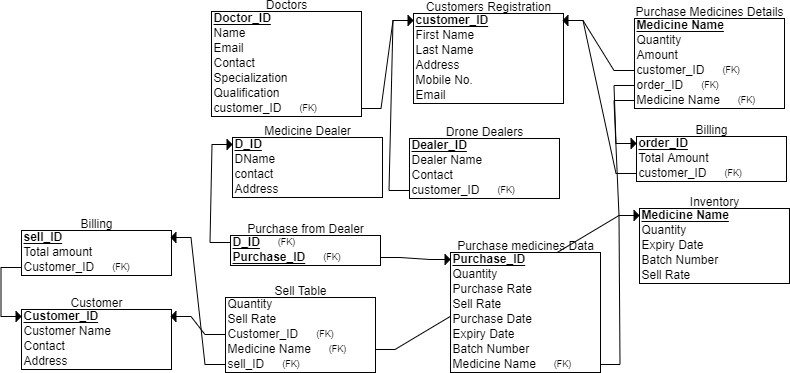
Drone Dealers(Dealer\_ID(PK),Dealer Name,Contact, customer\_ID(FK)) Medicine Dealer(D\_ID(PK),DName,Contact,Address)

Purchase from Dealer(D\_ID(FK),Purchase\_ID(FK))

Purchase Medicines Data(Purchase\_ID(Pk),Quantity,PurchaseRate,SellRate,Purchase Date, Expiry Date ,Batch Number,Medicine Name(FK))

Inventory(Medicine Name(PK),Quantity,Expiry Date, Batch Number,Sell Rate) Sell Table(Quantity,SellRate,Customer\_ID(FK),Medicine Name(FK),Sell\_ID(FK)) Customer(Customer\_ID(PK),Customer Name,Contact, Address) Billing(sell\_ID(PK),TotalAmount,Customer\_ID(FK))

# Relational Schema:-



**Normalisation:-**

1. DOCTOR(Doctor\_ID(PK),Name,Email,Contact,Specialization,Qualification,customer\_ID(FK)) Doctor\_ID -> Name

Doctor\_ID ->Email Doctor\_ID ->Contact Doctor\_ID ->Specialisation Doctor\_ID ->Qualification

Email -> Contact

Candidate Key – Doctor\_ID

This is in 1NF,2NF but not in 3NF.

Doctor\_ID -> Email and Email -> Name

Email is a non-prime Attribute that’s why it’s not in 3NF

Doctor1(Doctor\_ID(PK),Specialization,Qualification,customer\_ID(FK)) This is in 3NF form

Doctor2(Email(PK), Contact) This is in 3NF form

1. Customer\_Registration(customer\_ID(PK),FirstName,LastName,Address,Mobile No. , Email) Customer\_ID -> Name

Customer\_ID ->Address

Customer\_ID ->Mobile No. Customer\_ID ->Email

Candidate Key –Customer\_ID This is in 1NF,2NF and 3NF.

1. Purchase\_Medicines\_Details(MedicineName(PK),Quantity,Amount,customer\_ID(FK),order\_ID(FK

),Medicine Name(FK))

Medicine\_Name -> Quantity Medicine Name ->Amount Medicine Name ->customer\_ID Medicine Name ->order\_ID

Candidate key – Medicine Name This in 1NF,2NF and 3NF

1. Billing(order\_ID,TotalAmount,customer\_ID(FK)) Order\_ID -> Total Amount

Order\_ID ->customer\_ID Candidate key – order\_ID This is in 1NF ,2NF and 3NF.

1. Drone Dealers(Dealer\_ID(PK),Dealer Name,Contact, customer\_ID(FK))

Dealer\_ID -> Dealer Name Dealer\_ID -> Contact Customer\_ID ->Dealer\_Name

Candidate key – Dealer\_ID

This is in 1NF ,2NF but not in 3NF.

Drone Dealers1(Dealer\_ID(PK),DealerName,Contact) Drone Dealers2(Customer\_ID,Dealer\_ID)

1. Medicine Dealer(D\_ID(PK),DName,Contact,Address) D\_ID ->D\_Name

D\_ID -> Contact D\_ID -> Address

Candidate key – D\_ID

This is in 1NF , 2NF and 3NF.

1. Purchase from Dealer(D\_ID(FK),Purchase\_ID(FK)) D\_ID ->Purchase\_ID

Candidate key – D\_ID

This is in 1NF,2NF and 3NF.

1. Purchase Medicines Data(Purchase\_ID(Pk),Quantity,PurchaseRate,SellRate,Purchase Date, Expiry Date ,Batch Number,Medicine Name(FK))

Purchase\_ID -> Quantity Purchase\_ID -> Purchase Rate Purchase\_ID -> Sell Rate Purchase\_ID -> Purchase Date Purchase\_ID ->Expiry\_Date Purchase\_ID -> Batch Number Purchase\_ID -> MedicineName Medicine\_Name ->Quantity Medicine Name -> Sell Rate Medicine Name -> Expiry Date Purchase Date ->Purchase\_ID

Candidate Key – Purchase\_ID,(Medicine Name,Purchase Date) This is in 1NF ,2NF but not in 3NF.

Purchase Medicines Data1(Purchase\_ID(Pk),Purchase Date)

Purchase Medicines Data2(Medicine Name(PK),Sell Rate,ExpiryDate,Batch Number,) Now These are in 3NF

1. Inventory(Medicine Name(PK),Quantity,Expiry Date, Batch Number,Sell Rate)

Medicine Name ->Quantity Medicine Name -> Expiry Date Medicine Name -> Batch Number Medicine Name -> Sell Rate

This is in 1NF ,2NF and 3NF.

1. Sell Table(Quantity,SellRate,Customer\_ID(FK),Medicine Name(FK),Sell\_ID(FK)) Customer\_ID->Sell\_ID

Medicine Name -> Sell Rate Medicine Name -> Quantity

Candidate keys – Medicine Name ,Customer\_ID This is not in 2NF.

Sell Table1(Quantity,SellRate,Customer\_ID(FK),Medicine Name(FK))

Sell Table2(Customer\_ID(FK),Sell\_ID(FK)) This is in 3NF.

1. Customer(Customer\_ID(PK),Customer Name,Contact, Address)

Customer\_ID ->customer\_Name Customer\_ID -> Contact Customer\_ID -> Address

Candidate key – Customer\_ID. This in 1NF,2NF and 3NF.

1. Billing(sell\_ID(PK),TotalAmount,Customer\_ID(FK))

Sell\_ID -> Total Amount Sell\_ID ->customer\_ID

Candidate key – Sell\_ID This is in 1NF ,2NF and 3NF.

# Create Tables SQL Commands:

CREAľE ľABḺE C"stomcís\_Rcgistíatio⭲ (

Iiíst\_Namc :aíckaí2(20) NOľ NUḺḺ, Ḻast\_Namc :aíckaí2(20),

Addícss :aíckaí2(40),

Mobilc\_No. ⭲"mbcí(10) NOľ NUḺḺ,

Email :aíckaí2(20) NOľ NUḺḺ, c"stomcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (c"stomcí\_IK)

);

CREAľE ľABḺE C"stomcí (

C"stomcí\_Namc :aíckaí2(20) NOľ NUḺḺ,

Co⭲tact\_ :aíckaí2(20) NOľ NUḺḺ,

Addícss :aíckaí2(20) , C"stomcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (C"stomcí\_IK)

);

CREAľE ľABḺE Mcdici⭲c\_Kcalcí (

KNamc :aíckaí2(20) NOľ NUḺḺ,

co⭲tact ⭲"mbcí(10) NOľ NUḺḺ,

Addícss :aíckaí2(20) NOľ NUḺḺ,

K\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (K\_IK)

);

CREAľE ľABḺE I⭲:c⭲toíQ (

Mcdici⭲c\_Namc :aíckaí2(20) NOľ NUḺḺ,

Q"a⭲titQ INľ NOľ NUḺḺ, ExpiíQ\_Katc Katc NOľ NUḺḺ, Batck\_N"mbcí INľ NOľ NUḺḺ, Scll\_Ratc INľ NOľ NUḺḺ,

PRIMARY KEY (Mcdici⭲c\_Namc)

);

CREAľE ľABḺE Billi⭲g (

oídcí\_IK INľ NOľ NUḺḺ, ľotal\_Amo"⭲t INľ NOľ NUḺḺ, c"stomcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (oídcí\_IK),

IOREIGN KEY (c"stomcí\_IK) REIERENCES C"stomcís\_Rcgistíatio⭲(c"stomcí\_IK)

);

CREAľE ľABḺE Billi⭲g (

scll\_IK INľ NOľ NUḺḺ, ľotal\_amo"⭲t INľ NOľ NUḺḺ, C"stomcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (scll\_IK),

IOREIGN KEY (C"stomcí\_IK) REIERENCES C"stomcí(C"stomcí\_IK)

);

CREAľE ľABḺE Koctoí1( Koctoí\_IK INľ NOľ NUḺḺ,

Spccializatio⭲ :aíckaí2(20) NOľ NUḺḺ, Q"aliricatio⭲ :aíckaí2(20) NOľ NUḺḺ, C"stomcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY(Koctoí\_IK),

IOREIGN KEY(C"stomcí\_IK) REIERENCES C"stomcís\_Rcgistíatio⭲(C"stomcí\_IK)

);

CREAľE ľABḺE Koctoí2(

Email :aíckaí2(20) NOľ NUḺḺ, Co⭲tact INľ NOľ NUḺḺ, PRIMARY KEY (Email)

);

CREAľE ľABḺE Kío⭲c Kcalcís1( Kcalcí\_IK INľ NOľ NUḺḺ,

Kcalcí Namc :aíckaí(20) NOľ NUḺḺ, Co⭲tact INľ NOľ NUḺḺ,

PRIMARY KEY (Kcalcí\_IK)

);

CREAľE ľABḺE Kío⭲c Kcalcís2( C"stomcí\_IK INľ NOľ NUḺḺ, Kcalcí\_IK INľ NOľ NUḺḺ

);

CREAľE ľABḺE P"íckasc\_Mcdici⭲cs\_Kctails (

Mcdici⭲c\_Namc :aíckaí2(20) NOľ NUḺḺ,

Q"a⭲titQ INľ NOľ NUḺḺ,

Amo"⭲t INľ NOľ NUḺḺ, c"stomcí\_IK INľ NOľ NUḺḺ, oídcí\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (Mcdici⭲c\_Namc),

IOREIGN KEY (c"stomcí\_IK) REIERENCES C"stomcís\_Rcgistíatio⭲(c"stomcí\_IK),

IOREIGN KEY (oídcí\_IK) REIERENCES Billi⭲g(oídcí\_IK),

IOREIGN KEY (Mcdici⭲c\_Namc) REIERENCES I⭲:c⭲toíQ(Mcdici⭲c\_Namc)

);

CREAľE ľABḺE P"íckasc Mcdici⭲cs Kata1( P"íckasc\_IK INľ NOľ NUḺḺ,

P"íckasc Katc KAľE NOľ NUḺḺ, PRIMARY KEY (P"íckasc\_IK)

);

CREAľE ľABḺE P"íckasc Mcdici⭲cs Kata2( Mcdici⭲c Namc :aíckaí(20) NOľ NUḺḺ, Scll Ratc INľ NOľ NUḺḺ,

Expiíc Katc KAľE NOľ NUḺḺ, Batck N"mbcí INľ NOľ NUḺḺ, PíimaíQ KcQ(Mcdici⭲c Namc)

);

CREAľE ľABḺE Scll ľablc1( Q"a⭲titQ INľ NOľ NUḺḺ, Scll Ratc INľ NOľ NUḺḺ, C"stomcí\_IK INľ NOľ NUḺḺ,

Mcdici⭲c Namc :aíckaí(20) NOľ NUḺḺ,

IOREIGN KEY(C"stomcí\_IK) REIERENCES C"stomcí(C"stomcí\_IK),

IOREIGN KEY (MEKICINE\_NAME) REIERENCES INVENľORY(MEKICINE\_NAME)

);

CREAľE ľABḺE Scll ľablc2( C"stomcí\_IK INľ NOľ NUḺḺ, Scll\_IK INľ NOľ NUḺḺ,

IOREIGN KEY(C"stomcí\_IK) REIERENCES C"stomcí(C"stomcí\_IK), IOREIGN KEY(Scll\_IK) REIERENCES Billi⭲gs(Scll\_IK)

);

CREAľE ľABḺE P"íckasc\_ríom\_Kcalcí (

K\_IK INľ NOľ NUḺḺ,

P"íckasc\_IK INľ NOľ NUḺḺ,

PRIMARY KEY (K\_IK, P"íckasc\_IK),

IOREIGN KEY (K\_IK) REIERENCES Mcdici⭲c\_Kcalcí(K\_IK),

IOREIGN KEY (P"íckasc\_IK) REIERENCES P"íckasc\_mcdici⭲cs\_Kata(P"íckasc\_IK)

);

**Inserting Values In Tables:-**

cusotmer registration table InsertintoCustomers\_Registrationvalues('christopher','comstock' ,'Wrngl’, ‘TS’, IND', 9871593584, 'comstock@gmail.com', 1);

insert into Customers\_Registration values ('Harry', 'Styles', 'BZA,AP,IND',2541251253,'HarryStyles0102@gmail.com', 2); insert into Customers\_Registration values ('Nail', 'Horan', 'Krnl,AP,IND',6985421580,'Nail0171@gmail.com', 3);

insert into Customers\_Registration values ('Shawn', 'Mendes', 'Indore,MP,IND',5897415895,'ShawnMendes@yahoo.com', 4); insert into Customers\_Registration values ('Taylor', 'Swift', 'Delhi,Delhi,IND',9894598720,'taylor@swifies.com', 5);

======================cusotmer table=====================

insert into cusotmer values('Olivia',9876589120,'BZA,AP,IND',1001); insert into cusotmer values('Rosee',9872389120,'Indore,MP,IND',1002);

insert into cusotmer values('Liam Payne',8976589120,'Ballarshah,Maharastra,IND',1003); insert into cusotmer values('Marshmello',9812389120,'BZA,AP,IND',1004);

insert into cusotmer values('Ryan Ronalds',9636589120,'chennai,TN,IND',1005); insert into cusotmer values('Selena',9876525890,'Ooty,kerala,IND',1006);

medicine dealer

insert into medicine\_dealer values ('Rajat',9876543210,'Wrngl,TS,IND',2001); insert into medicine\_dealer values ('Vamsi',9123453210,'Delhi,Delhi,IND',2002); insert into medicine\_dealer values ('Vijay',9876599910,'chennai,TN,IND',2003); insert into medicine\_dealer values ('Harsh',9874783210,'Indore,MP,IND',2004);

===========================inventory===========================

insert into inventory values ('Dolo 550',20,23-05-2024,3001,75); insert into inventory values ('baclofen',70,23-09-2026,3002,60); insert into inventory values ('Halcion',20,23-05-2024,3003,20);

insert into inventory values ('caffeine citrate solution-oral',55,05-10-2022,3004,44); insert into inventory values ('Jantoven',100,31-05-2031,3005,60);

insert into inventory values ('magaldrate-oral',40,08-07-2027,3006,150); insert into inventory values ('maraviroc',60,03-07-2026,3007,85);

insert into inventory values ('Odomzo',174,23-01-2030,3008,75); insert into inventory values ('ofloxacin',125,01-01-2027,3009,10);

billing table 1

insert into billing values (4001,50,2001); insert into billing values (4002,170,2002); insert into billing values (4003,88,2003); insert into billing values (4004,144,2004);

==========================billing table 2=============================

insert into billing values (5001,50,2001); insert into billing values (5002,170,2002); insert into billing values (5003,88,2003); insert into billing values (5004,144,2004);

doctor1 table

insert into doctor1 values (6001,'general therapy','MBBS',1); insert into doctor1 values (6001,'Eye specalist','MBBS',2); insert into doctor1 values (6001,'heart surgeory','MBBS',3); insert into doctor1 values (6001,'thort infection','MBBS',5);

=============================doctor2 table================================

insert into doctor2 values [(Vamsi0610@gmail.com,](mailto:(Vamsi0610@gmail.com) 974136850); insert into doctor2 values [(Vijay0411@gmail.com,](mailto:(Vijay0411@gmail.com) 974136850); insert into doctor2 values [(Rajat0212@gmail.com,](mailto:(Rajat0212@gmail.com) 974136850); insert into doctor2 values [(christopher19@gmail.com,](mailto:(christopher19@gmail.com) 974136850);

drone dealers1 table

insert into drone\_dealers1 values (8001,'Tarun',0852 245 222); insert into drone\_dealers1 values (8002,'Sam',0853 155 571); insert into drone\_dealers1 values (8003,'Vakeel',0853 888 985); insert into drone\_dealers1 values (8004,'Jaydev',0853 144 141); insert into drone\_dealers1 values (8005,'Naveen',0852 114 545);

===========================drone dealers2===================================

insert into drone\_dealers2 values (1,8002); insert into drone\_dealers2 values (2,8003); insert into drone\_dealers2 values (3,8004); insert into drone\_dealers2 values (5,8005); insert into drone\_dealers2 values (6,8001);

purchase medicine details

Insert into purchase\_medicine\_details values('Dolo550',20,100,1,4001,3001); Insert into purchase\_medicine\_details values(' baclofen ',10,200,1,4004,3002); Insert into purchase\_medicine\_details values(' maraviroc ',24,140,1,4003,3005); Insert into purchase\_medicine\_details values(' Odomzo ',30,230,1,4002,3003); Insert into purchase\_medicine\_details values(‘ofloxacin’,40,250,1,4000,3004);

purchase medicines data1

Insert into purchase\_medicine\_data1 values(101,27-04-2021); Insert into purchase\_medicine\_data1 values(102,24-04-2021); Insert into purchase\_medicine\_data1 values(107,21-03-2021); Insert into purchase\_medicine\_data1 values(104,22-03-2021); Insert into purchase\_medicine\_data1 values(103,27-04-2021);

purchase medicines data2

Insert into purchase\_medicine\_data2 values(‘baclofen’ ,12,27-04-2021,132414); Insert into purchase\_medicine\_data2 values(' maraviroc ',15,24-04-2021,549253); Insert into purchase\_medicine\_data2 values(' Odomzo ',20,21-03-2021,232412); Insert into purchase\_medicine\_data2 values(‘ofloxacin’,13,22-03-2021,432134); Insert into purchase\_medicine\_data2 values('Dolo550’,4,27-04-2021,452311);

Sell Table\_1

Insert into Sell Table\_1 values(30,12,4010,‘baclofen’); Insert into Sell Table\_1 values(12,14,4002,‘Dolo 550’); Insert into Sell Table\_1 values(14,17,4003,‘ Odomzo’); Insert into Sell Table\_1 values(45,13,4001,‘ ofloxacin’);

Sell Table\_2

Insert into Sell Table\_2 values(4002,5001); Insert into Sell Table\_2 values(4004,5005); Insert into Sell Table\_2 values(4003,5008); Insert into Sell Table\_2 values(4001,5007);

Purchase\_from\_Dealer Insert into Sell Table\_1 values(2001,1); Insert into Sell Table\_1 values(2003,2); Insert into Sell Table\_1 values(2004,3); Insert into Sell Table\_1 values(2005,4);