

## **PROBLEM STATEMENT:**

The aim of this project is to make a DataBase for an E-Commerce site to manage the orders in their website and maintaining all the orders and transactions made through their site which is normalised to maximum extent and reducing data redundancy

## **ASSUMPTIONS:**

### **WARE HOUSE:**

All products of the e-Commerce site are stored in multiple ware house's located in different locations from which the products of orders ordered from the site are delivered to customers.

Same product can be stored in multiple ware houses

### **PRODUCTS:**

The records of all products are maintained in this table. Each product has a unique product ID. The price of the product, name and category of the product are stored in this table.

### **STOCK:**

This relation between product and ware house gives us the quantity of all products present in every ware house along with its expiry date.

### **SUPPLIES:**

The record of no of products being supplied, supplied date and expiry date to a ware house are maintained by this table. Supplies are received only if the quantity of the product in the ware house is zero.

### **EXPIRED:**

The products are checked every day. If a product is found expired in a ware house then it will be returned back

### **CUSTOMER:**

This table stores the details of customer i.e username, password,...

Each customer is identified by a unique username. A customer can store multiple addresses and cards

Payments are made only through the cards saved by the customer and the orders are delivered to the address saved by the customer

**CART:**

It is a relation between a customer and the products.

The products and its quantity wishlisted by the customer are stored in this table.

**ORDER:**

All the orders placed by the customer are stored in this table which are identified by order\_id.

The record of no of products ordered, the address to which it is delivered, the price of the order and the ware house from which the products are delivered are maintained in this table

An order can be successfully placed only if all the products in the order are available in stock from a single warehouse and the payment is successful

**PAYMENT:**

The payment of every order placed will be received online using debit card only.

If the payment is failed then order will be cancelled. Once the status of payment is successful then order is successfully placed

**DELIVERY:**

Every order placed from the site are delivered by a delivery service.

Each delivery can be tracked by the customer using the tracking id provided by the service

**FLOW OF PROCESS:**

The products are stored in multiple Warehouse's

Customer orders products from the E-Commerce Site

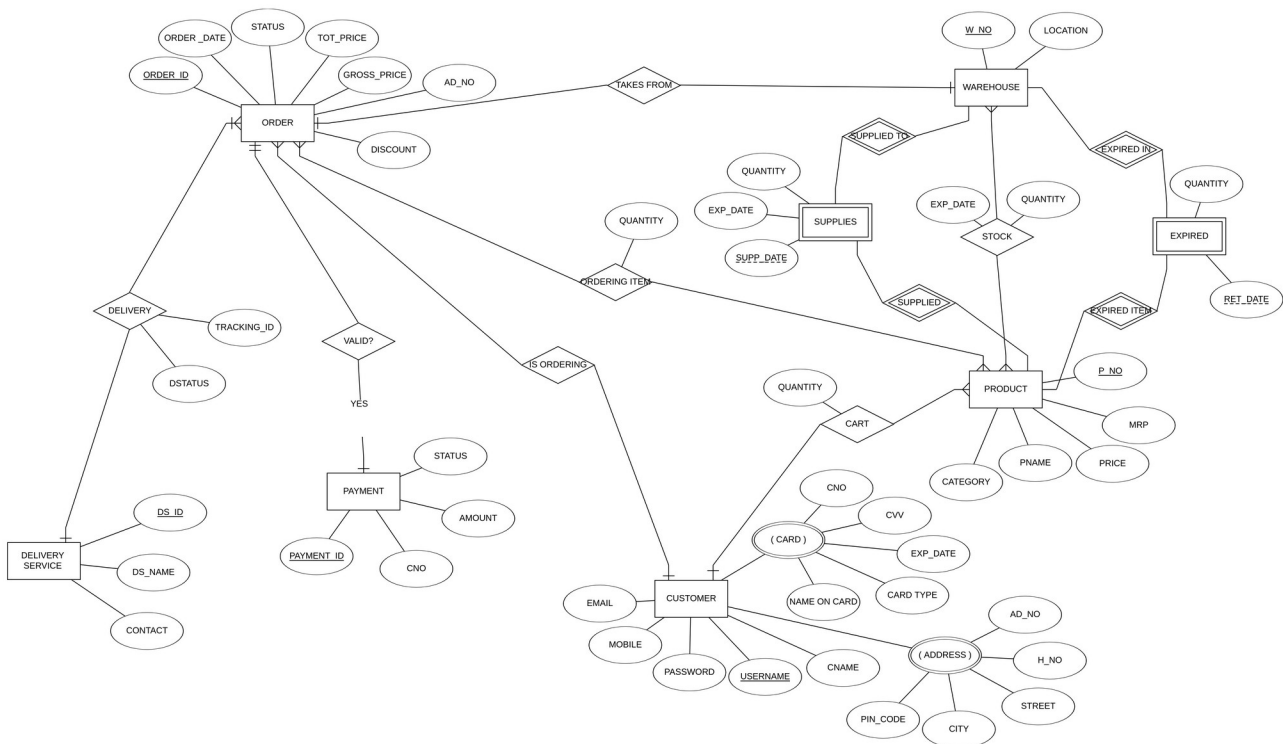
If all the products in order are present in a single warehouse in required quantity then it is proceeded to payments

If payment is successful then order is placed

Payment is made only through online transactions using debit cards

After successful order it is sent through delivery service to the saved address

## ER DIAGRAM:



## ENTITIES

Customer  
Product  
Ware House  
Order  
Payment  
Delivery Service  
Supplies  
Expired

## RELATIONS

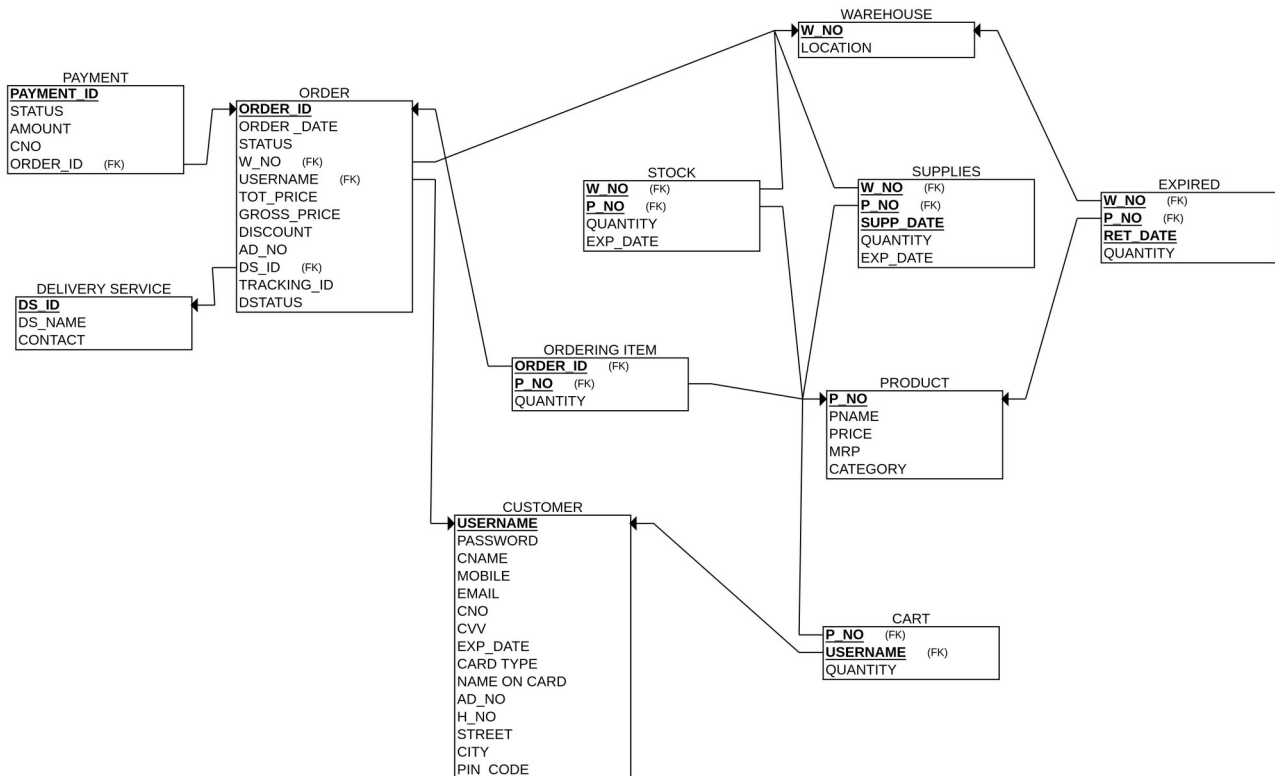
Cart  
Is Ordering  
Supplies To, Supplied  
Stock  
Expired IN, Expired Item  
Takes From  
Ordering Item  
Delivery

\* SUPPLIES and EXPIRED are weak entities

SUPPLIES is identified by relations SUPPLIED and SUPPLIED TO

EXPIRED is identified by relations EXPIRED IN, EXPIRED ITEM

## RELATIONAL SCHEMA:



## FUNCTIONAL DEPENDENCIES AND TABLES BEFORE NORMALIZATION:

1.

### WARE HOUSE:

(W\_ID, LOCATION)

W\_NO -> LOCATION

NORMAL FORM: BCNF

2.

### PRODUCTS:

(P\_NO, PNAME, PRICE, MRP, CATEGORY)

P\_NO -> PNAME, PRICE, MRP, CATEGORY

NORMAL FORM: BCNF

3.

### STOCK:

(W\_NO, P\_NO, QUANTITY, EXP\_DATE)

W\_NO, P\_NO -> QUANTITY, EXP\_DATE

NORMAL FORM: BCNF

4.

**SUPPLIES:**

(W\_NO,P\_NO,QUANTITY,SUPP\_DATE,EXP\_DATE)

W\_NO,P\_NO,SUPP\_DATE -> QUANTITY,EXP\_DATE

NORMAL FORM; BCNF

5.

**EXPIRED:**

(W\_NO,P\_NO,RET\_DATE,QUANTITY)

W\_NO,P\_NO,RET\_DATE -> QUANTITY

NORMAL FORM: BCNF

6.

**CUSTOMER:**

(USERNAME,PASSWORD,CNAME,MOBILE,EMAIL,CNO,CVV,EXP\_DATE,  
CARD\_TYPE,NAMEONCARD,AD\_NO,HNO,STREETCITY,PINCODE)

USERNAME,CNO,AD\_ID -> PASSWORD,CNAME,MOBILE,EMAIL,CVV,  
EXP\_DATE,CARD\_TYPE,NAMEONCARD,HNO,  
STREET,CITY,PINCODE

USERNAME -> PASSWORD,CNAME,MOBILE,EMAIL

USERNAME,CNO -> CVV,EXP\_DATE,CARD\_TYPE,NAMEONCARD

USERNAME,AD\_NO -> HNO,STREET,CITY,PINCODE

NORMAL FORM: NOT IN ANY NORMAL FORM

7.

**CART:**

(USERNAME,P\_NO,QUANTITY)

USERNAME,P\_NO -> QUANTITY

NORMAL FORM: BCNF

8.

**DELIVERY SERVICE:**

(DS\_ID,DS\_NAME,CONTACT)

DS\_ID -> DS\_NAME,CONTACT

NORMAL FORM : BCNF

**9.**

**ORDER:**

(ORDER\_ID,ORDER\_DATE,STATUS,W\_NO,USERNAME,TOT\_PRICE,  
GROSS\_PRICE,DISCOUNT,AD\_NO,DS\_ID,TRACKING\_ID,DSTATUS)

ORDER\_ID -> ORDER\_DATE,STATUS,W\_NO,USERNAME,TOT\_PRICE,  
GROSS\_PRICE,DISCOUNT,AD\_NO,DS\_ID,TRACKING\_ID  
DSTATUS

NORMAL FORM: BCNF

**10.**

**ORDERING\_ITEM:**

(ORDER\_ID,P\_NO,QUANTITY)

ORDER\_ID,P\_NO -> QUANTITY

NORMAL FORM : BCNF

**11.**

**PAYMENT:**

(PAYMENT\_ID,STATUS,AMOUNT,CNO,ORDER\_ID,AMOUNT)

PAYMENT\_ID -> STATUS,AMOUNT,CNO,ORDER\_ID,AMOUNT

NORMAL FORM: BCNF

## **FUNCTIONAL DEPENDENCIES AND TABLES AFTER NORMALIZATION:**

**1.**

### **WARE HOUSE:**

(W\_ID,LOCATION)

W\_NO -> LOCATION

NORMAL FORM: BCNF

**2.**

### **PRODUCTS:**

(P\_NO,PNAME,PRICE,MRP,CATEGORY)

P\_NO -> PNAME,PRICE,MRP,CATEGORY

NORMAL FORM: BCNF

**3.**

### **STOCK:**

(W\_NO,P\_NO,QUANTITY,EXP\_DATE)

W\_NO,P\_NO -> QUANTITY,EXP\_DATE

NORMAL FORM: BCNF

**4.**

### **SUPPLIES:**

(W\_NO,P\_NO,QUANTITY,SUPP\_DATE,EXP\_DATE)

W\_NO,P\_NO,SUPP\_DATE -> QUANTITY,EXP\_DATE

NORMAL FORM; BCNF

**5.**

### **EXPIRED:**

(W\_NO,P\_NO,RET\_DATE,QUANTITY)

W\_NO,P\_NO,RET\_DATE -> QUANTITY

NORMAL FORM: BCNF

**6.**

**CUSTOMER:**

Customer table after normalization decomposed into  
CUSTOMER, ADDRESS, CARD

CUSTOMER (USERNAME, PASSWORD, CNAME, MOBILE, EMAIL)

ADDRESS (USERNAME, AD\_NO, HNO, STREET, CITY, PINCODE)

CARD (USERNAME, CNO, CVV, EXP\_DATE, CARD\_TYPE, NAMEONCARD)

USERNAME -> PASSWORD, CNAME, MOBILE, EMAIL

USERNAME, AD\_NO -> HNO, STREET, CITY, PINCODE

USERNAME, CNO -> CVV, EXP\_DATE, CARD\_TYPE, NAMEONCARD

NORMAL FORM: BCNF

**7.**

**ADDRESS:**

(USERNAME, AD\_NO, HNO, STREET, CITY, PINCODE)

USERNAME, AD\_NO -> HNO, STREET, CITY, PINCODE

NORMAL FORM : BCNF

**8.**

**CARD:**

(USERNAME, CNO, CVV, EXP\_DATE, CARD\_TYPE, NAMEONCARD)

USERNAME, CNO -> CVV, EXP\_DATE, CARD\_TYPE, NAMEONCARD

NORMAL FORM: BCNF

**9.**

**CART:**

(USERNAME, P\_NO, QUANTITY)

USERNAME, P\_NO -> QUANTITY

NORMAL FORM: BCNF

**10.**

**DELIVERY SERVICE:**

(DS\_ID, DS\_NAME, CONTACT)

DS\_ID -> DS\_NAME, CONTACT

NORMAL FORM : BCNF



**11.**

**ORDER:**

(ORDER\_ID,ORDER\_DATE,STATUS,W\_NO,USERNAME,TOT\_PRICE,  
GROSS\_PRICE,DISCOUNT,AD\_NO,DS\_ID,TRACKING\_ID,DSTATUS)

ORDER\_ID -> ORDER\_DATE,STATUS,W\_NO,USERNAME,TOT\_PRICE,  
GROSS\_PRICE,DISCOUNT,AD\_NO,DS\_ID,TRACKING\_ID  
DSTATUS

NORMAL FORM: BCNF

**12.**

**ORDERING\_ITEM:**

(ORDER\_ID,P\_NO,QUANTITY)

ORDER\_ID,P\_NO -> QUANTITY

NORMAL FORM : BCNF

**13.**

**PAYMENT:**

(PAYMENT\_ID,STATUS,AMOUNT,CNO,ORDER\_ID,AMOUNT)

PAYMENT\_ID -> STATUS,AMOUNT,CNO,ORDER\_ID,AMOUNT

NORMAL FORM: BCNF

# IMPLEMENTATION IN SQL

```
create database ecomm_project;  
use ecomm_project;
```

```
create table warehouse  
(  
    w_no int primary key,  
    location varchar(50)  
);
```

```
create table products  
(  
    p_no int primary key,  
    pname varchar(50),  
    price float,  
    mrp float,  
    category varchar(20)  
);
```

```
create table stock  
(  
    p_no int,  
    w_no int,  
    quantity int,  
    exp_date date,  
    primary key(p_no,w_no),  
    foreign key(p_no) references products(p_no),  
    foreign key(w_no) references warehouse(w_no)  
);
```

```
create table supplies  
(  
    p_no int,  
    w_no int,  
    supp_date date,  
    quantity int,  
    exp_date date,  
    primary key(p_no,w_no,supp_date),  
    foreign key(p_no) references products(p_no),  
    foreign key(w_no) references warehouse(w_no)
```

);

create table expired

```
(
    p_no int,
    w_no int,
    ret_date date,
    quantity int,
    primary key(p_no,w_no,ret_date),
    foreign key(p_no) references products(p_no),
    foreign key(w_no) references warehouse(w_no)
);
```

create table customer

```
(
    username varchar(50) primary key,
    pass varchar(50),
    cname varchar(50),
    phno varchar(10),
    email varchar(50)
);
```

create table card

```
(
    cno int,
    username varchar(50),
    cvv int,
    exp_date date,
    nameoncard varchar(50),
    card_type varchar(20),
    primary key(cno,username),
    foreign key(username) references customer(username)
);
```

create table address

```
(
    ad_no int,
    username varchar(50),
    hno varchar(10),
    street varchar(10),
    city varchar(50),
    pincode int,
```

```
primary key(ad_no,username),  
foreign key (username) references customer(username)  
);
```

```
create table cart  
(  
    username varchar(50),  
    p_no int,  
    quantity int,  
    primary key(username,p_no),  
    foreign key (username) references customer(username),  
    foreign key (p_no) references products(p_no)  
);
```

```
create table delivery_service  
(  
    ds_id int primary key,  
    ds_name varchar(50),  
    contact varchar(50)  
);
```

```
create table order_  
(  
    order_id int primary key,  
    order_date date,  
    order_status varchar(20),  
    w_no int,  
    username varchar(50),  
    tot_price float,  
    gorss_price float,  
    discount float,  
    ad_no int,  
    ds_id int,  
    tracking_id int,  
    dstatus varchar(20),  
    foreign key (w_no) references warehouse(w_no),  
    foreign key (username) references customer(username),  
    foreign key (ad_no) references address(ad_no),  
    foreign key (ds_id) references delivery_service(ds_id)  
);
```

```
create table order_item
```

```
(
    order_id int,
    p_no int,
    quantity int,
    primary key(order_id,p_no),
    foreign key(order_id) references order_(order_id),
    foreign key(p_no) references products(p_no)
);
```

create table payment

```
(
    payment_id int primary key,
    payment_status varchar(20),
    amount float,
    cno int,
    order_id int,
    foreign key (cno) references card(cno),
    foreign key (order_id) references order_(order_id)
);
```

## OUTPUT OF CREATION

Action Output ▾					
	#	Time	Action	Message	Duration / Fetch
✓	1	01:12:22	create database ecomm_project	1 row(s) affected	0.249 sec
✓	2	01:12:25	use ecomm_project	0 row(s) affected	0.00084 sec
✓	3	01:12:28	create table warehouse ( w_no int primary key, loca...	0 row(s) affected	0.846 sec
✓	4	01:12:32	create table products ( p_no int primary key, pname v...	0 row(s) affected	0.679 sec
✓	5	01:12:36	create table stock ( p_no int, w_no int, quantity int, ...	0 row(s) affected	1.981 sec
✓	6	01:12:41	create table supplies ( p_no int, w_no int, supp_dat...	0 row(s) affected	1.586 sec
✓	7	01:12:45	create table expired ( p_no int, w_no int, ret_date ...	0 row(s) affected	1.546 sec
✓	8	01:12:49	create table customer ( username varchar(50) primary k...	0 row(s) affected	0.895 sec
✓	9	01:12:58	create table card ( cno int, username varchar(50), c...	0 row(s) affected	3.134 sec
✓	10	01:13:04	create table address ( ad_no int, username varchar(5...	0 row(s) affected	4.371 sec
✓	11	01:13:14	create table cart ( username varchar(50), p_no int, ...	0 row(s) affected	2.877 sec
✓	12	01:13:20	create table delivery_service ( ds_id int primary key, ...	0 row(s) affected	2.364 sec
✓	13	01:13:24	create table order_ ( order_id int primary key, orde...	0 row(s) affected	3.376 sec
✓	14	01:13:32	create table order_item ( order_id int, p_no int, q...	0 row(s) affected	4.535 sec
✓	15	01:13:38	create table payment ( payment_id int primary key, p...	0 row(s) affected	3.338 sec

# INSERTION OF VALUES INTO DATABASE

```
insert into warehouse values(1,'HYDERABAD');
```

```
insert into warehouse values(2,'BENGALURU');
```

```
insert into warehouse values(3,'MUMBAI');
```

```
select * from warehouse;
```

```
insert into products values(1,'OPPO F-19  
PRO',22000,25000,'ELECTRONICS');
```

```
insert into products values(2,'REALME 8  
PRO',18000,20000,'ELECTRONICS');
```

```
insert into products values(3,'PARLE-G',48,50,'FOOD');
```

```
insert into products values(4,'DIARY MILK',67,70,'FOOD');
```

```
insert into products values(5,'BOAT HEADSET',1500,2000,'ACCESORIES');
```

```
insert into products values(6,'CINTHOL SOAP',30,33,'COSMETICS');
```

```
insert into products values(7,'MAGGIE',69,72,'GROCERIES');
```

```
insert into products values(8,'BOOST',100,105,'GROCERIES');
```

```
select * from products;
```

```
insert into stock values(1,1,4,null);
```

```
insert into stock values(2,1,11,null);
```

```
insert into stock values(3,1,7,str_to_date('10-11-2022','%m-%d-%Y'));
```

```
insert into stock values(4,1,11,str_to_date('10-1-2022','%m-%d-%Y'));
```

```
insert into stock values(5,1,10,str_to_date('10-21-2022','%m-%d-%Y'));
insert into stock values(3,2,9,str_to_date('10-01-2022','%m-%d-%Y'));
insert into stock values(4,2,18,str_to_date('10-30-2022','%m-%d-%Y'));
insert into stock values(5,2,10,null);
insert into stock values(6,2,19,str_to_date('10-11-2022','%m-%d-%Y'));
insert into stock values(7,2,11,str_to_date('10-10-2022','%m-%d-%Y'));
insert into stock values(1,3,1,null);
insert into stock values(2,3,6,null);
insert into stock values(6,3,13,str_to_date('10-09-2022','%m-%d-%Y'));
insert into stock values(7,3,5,str_to_date('10-05-2022','%m-%d-%Y'));
insert into stock values(8,3,4,str_to_date('10-04-2022','%m-%d-%Y'));

select * from stock;
```

```
insert into supplies values(1,1,str_to_date('10-11-2020','%m-%d-%Y'),5,null);
insert into supplies values(2,1,str_to_date('10-01-2020','%m-%d-%Y'),11,null);
insert into supplies values(3,1,str_to_date('10-14-2020','%m-%d-%Y'),9,str_to_date('10-11-2022','%m-%d-%Y'));
insert into supplies values(4,1,str_to_date('10-12-2020','%m-%d-%Y'),11,str_to_date('10-1-2022','%m-%d-%Y'));
insert into supplies values(5,1,str_to_date('10-22-2020','%m-%d-%Y'),13,str_to_date('10-21-2022','%m-%d-%Y'));
insert into supplies values(3,2,str_to_date('10-19-2020','%m-%d-%Y'),10,str_to_date('10-01-2022','%m-%d-%Y'));
insert into supplies values(4,2,str_to_date('10-16-2020','%m-%d-%Y'),22,str_to_date('10-30-2022','%m-%d-%Y'));
insert into supplies values(5,2,str_to_date('10-14-2020','%m-%d-%Y'),10,null);
```

```
insert into supplies values(6,2,str_to_date('10-10-2020','%m-%d-%Y'),19,str_to_date('10-11-2022','%m-%d-%Y'));

insert into supplies values(7,2,str_to_date('10-10-2020','%m-%d-%Y'),14,str_to_date('10-10-2022','%m-%d-%Y'));

insert into supplies values(1,3,str_to_date('10-07-2020','%m-%d-%Y'),11,null);

insert into supplies values(2,3,str_to_date('10-18-2020','%m-%d-%Y'),1,null);

insert into supplies values(6,3,str_to_date('10-14-2020','%m-%d-%Y'),7,str_to_date('10-09-2022','%m-%d-%Y'));

insert into supplies values(7,3,str_to_date('10-25-2020','%m-%d-%Y'),16,str_to_date('10-05-2022','%m-%d-%Y'));

insert into supplies values(8,3,str_to_date('10-29-2020','%m-%d-%Y'),5,str_to_date('10-04-2022','%m-%d-%Y'));

insert into supplies values(8,3,str_to_date('10-20-2020','%m-%d-%Y'),9,str_to_date('01-01-2021','%m-%d-%Y'));
```

```
select * from supplies;
```

```
insert into expired values(8,3,str_to_date('01-01-2021','%m-%d-%Y'),5);

select * from expired;
```

```
insert into customer values('SUSHITH','SUS','SUSHITH REDDY','111111111','sushith@xyz.com');
```

```
insert into customer values('PARTHIV','PAR','PARTHIV REDDY','222222222','parthiv@xyz.com');
```

```
insert into customer values('ABHINAV','ABHI','ABHINAV REDDY','333333333','abhinav@xyz.com');
```

```
insert into customer values('ROHITH','ROH','ROHITH RAO','444444444','rohith@xyz.com');
```



```
select * from customer;
```

```
insert into card values(1000,'SUSHITH',123,str_to_date('12-31-2025','%m-%d-%Y'),'A','VISA');
```

```
insert into card values(1001,'SUSHITH',456,str_to_date('12-31-2025','%m-%d-%Y'),'B','RUPAY');
```

```
insert into card values(1002,'PARTHIV',789,str_to_date('12-31-2025','%m-%d-%Y'),'C','MASTER CARD');
```

```
insert into card values(1003,'PARTHIV',145,str_to_date('12-31-2025','%m-%d-%Y'),'D','AMERICAN EXPRESS');
```

```
insert into card values(1004,'ROHITH',567,str_to_date('12-31-2025','%m-%d-%Y'),'E','RUPAY');
```

```
insert into card values(1005,'ABHINAV',123,str_to_date('12-31-2025','%m-%d-%Y'),'F','VISA');
```

```
select * from card;
```

```
insert into address values(1,'SUSHITH','1-1','A','HYDERABAD',500001);
```

```
insert into address values(2,'SUSHITH','1-2','B','HYDERABAD',500002);
```

```
insert into address values(1,'PARTHIV','1-3','C','HYDERABAD',500003);
```

```
insert into address values(2,'PARTHIV','1-4','D','HYDERABAD',500004);
```

```
insert into address values(1,'ABHINAV','1-5','E','HYDERABAD',500005);
```

```
insert into address values(1,'ROHITH','1-6','F','HYDERABAD',500006);
```

```
select * from address;
```

```
insert into cart values('SUSHITH',1,1);
```

```
insert into cart values('SUSHITH',3,2);
insert into cart values('SUSHITH',6,5);
insert into cart values('SUSHITH',8,3);
insert into cart values('PARTHIV',2,1);
insert into cart values('PARTHIV',4,3);
insert into cart values('PARTHIV',5,4);
insert into cart values('PARTHIV',6,2);
insert into cart values('ROHITH',2,1);
insert into cart values('ROHITH',7,4);
insert into cart values('ABHINAV',3,3);
insert into cart values('ABHINAV',5,1);
```

```
select * from cart;
```

```
insert into delivery_service values(1,'INDIA
POST','indiapost@indiapost.gov.in');
insert into delivery_service values(2,'BLUE DART','bluedart@bluedart.com');
insert into delivery_service values(3,'FEDEX','fedex@fedex.com');
insert into delivery_service values(4,'DHL','dhl@dhl.com');
```

```
select * from delivery_service;
```

```
insert into order_ values(1,str_to_date('12-31-2020','%m-%d-
%Y'),'SUCCESS',1,'SUSHITH',22098,25100,3004,1,1,1,'DELIVERED');
insert into order_ values(2,str_to_date('01-02-2021 ','%m-%d-
%Y'),'SUCCESS',2,'SUSHITH',268,280,12,2,2,2,'DELIVERED');
```

```
insert into order_ values(3,str_to_date('01-05-2021','%m-%d-%Y'),'SUCCESS',2,'PARTHIV',531,554,23,1,3,3,'DELIVERED');

insert into order_ values(4,str_to_date('01-09-2021','%m-%d-%Y'),'SUCCESS',3,'PARTHIV',500,525,25,2,4,4,'DELIVERED');

insert into order_ values(5,str_to_date('01-11-2021','%m-%d-%Y'),'SUCCESS',3,'ROHITH',18000,20000,2000,1,1,5,'DELIVERED');

insert into order_ values(6,str_to_date('01-16-2021','%m-%d-%Y'),'SUCCESS',3,'ABHINAV',90,99,9,1,2,6,'DELIVERED');

insert into order_ values(7,str_to_date('01-19-2021','%m-%d-%Y'),'SUCCESS',1,'ABHINAV',1500,200,500,1,3,7,'DELIVERED');

insert into order_ values(8,str_to_date('01-22-2021','%m-%d-%Y'),'NO STOCK',null,'SUSHITH',22148,25155,3007,1,null,null,null);

insert into order_ values(9,str_to_date('01-25-2021','%m-%d-%Y'),'NO STOCK',null,'PARTHIV',22136,25142,3006,2,null,null,null);

insert into order_ values(10,str_to_date('01-31-2021','%m-%d-%Y'),'PAYMENT FAILED',null,'ROHITH',18000,20000,2000,1,null,null,null);

select * from order_;
```

```
insert into order_item values(1,1,1);
insert into order_item values(1,3,2);
insert into order_item values(2,4,4);
insert into order_item values(3,3,1);
insert into order_item values(3,7,3);
insert into order_item values(4,8,5);
insert into order_item values(5,2,1);
insert into order_item values(6,6,3);
insert into order_item values(7,5,3);
```

```
insert into order_item values(8,1,1);
insert into order_item values(8,3,1);
insert into order_item values(8,8,1);
insert into order_item values(9,1,1);
insert into order_item values(9,4,1);
insert into order_item values(9,7,1);
insert into order_item values(10,2,1);
```

```
select * from order_item;
```

```
insert into payment values(1,'SUCCESS',22098,1000,1);
insert into payment values(2,'SUCCESS',268,1001,2);
insert into payment values(3,'SUCCESS',531,1002,3);
insert into payment values(4,'SUCCESS',500,1003,4);
insert into payment values(5,'SUCCESS',18000,1004,5);
insert into payment values(6,'SUCCESS',90,1005,6);
insert into payment values(7,'SUCCESS',1500,1005,7);
insert into payment values(8,'INSUFFICIENT FUNDS',18000,1004,10);
```

```
select * from payment;
```

# OUTPUT OF DATA INSERTION

## WAREHOUSE:

Result Grid			Filter Rows:
#	w_no	location	
1	1	HYDERABAD	
2	2	BENGALURU	
3	3	MUMBAI	
*	NULL	NULL	

## PRODUCTS:

Result Grid						Filter Rows:	Edit:
#	p_no	pname	price	mrp	category		
1	1	OPPO F-19 PRO	22000	25000	ELECTRONICS		
2	2	REALME 8 PRO	18000	20000	ELECTRONICS		
3	3	PARLE-G	48	50	FOOD		
4	4	DIARY MILK	67	70	FOOD		
5	5	BOAT HEADSET	1500	2000	ACCESORIES		
6	6	CINTHOL SOAP	30	33	COSMETICS		
7	7	MAGGIE	69	72	GROCERIES		
8	8	BOOST	100	105	GROCERIES		
*	NULL	NULL	NULL	NULL	NULL		

## STOCK:

Result Grid					Filter Rows:	Edit:
#	p_no	w_no	quantity	exp_date		
1	1	1	4	NULL		
2	1	3	1	NULL		
3	2	1	11	NULL		
4	2	3	6	NULL		
5	3	1	7	2022-10-11		
6	3	2	9	2022-10-01		
7	4	1	11	2022-10-01		
8	4	2	18	2022-10-30		
9	5	1	10	2022-10-21		
10	5	2	10	NULL		
11	6	2	19	2022-10-11		
12	6	3	13	2022-10-09		
13	7	2	11	2022-10-10		
14	7	3	5	2022-10-05		
15	8	3	4	2022-10-04		
*	NULL	NULL	NULL	NULL		

## SUPPLIES:

Result Grid						Filter Rows:	Ec
#	p_no	w_no	supp_date	quantity	exp_date		
1	1	1	2020-10-11	5	NULL		
2	1	3	2020-10-07	11	NULL		
3	2	1	2020-10-01	11	NULL		
4	2	3	2020-10-18	1	NULL		
5	3	1	2020-10-14	9	2022-10-11		
6	3	2	2020-10-19	10	2022-10-01		
7	4	1	2020-10-12	11	2022-10-01		
8	4	2	2020-10-16	22	2022-10-30		
9	5	1	2020-10-22	13	2022-10-21		
10	5	2	2020-10-14	10	NULL		
11	6	2	2020-10-10	19	2022-10-11		
12	6	3	2020-10-14	7	2022-10-09		
13	7	2	2020-10-10	14	2022-10-10		
14	7	3	2020-10-25	16	2022-10-05		
15	8	3	2020-10-20	9	2021-01-01		
16	8	3	2020-10-29	5	2022-10-04		
*	NULL	NULL	NULL	NULL	NULL		

#	p_no	w_no	ret_date	quantity
1	8	3	2021-01-01	5

Below the grid, there are buttons for 'NULL' and 'NOT NULL' for each column.

Result Grid						Filter Rows:			Edit:					
#	username	pass	cname	phno	email									
1	ABHINAV	ABHI	ABHINAV REDDY	3333333333	abhinav@xyz.com									
2	PARTHIV	PAR	PARTHIV REDDY	2222222222	parthiv@xyz.com									
3	ROHITH	ROH	ROHITH RAO	4444444444	rohith@xyz.com									
4	SUSHITH	SUS	SUSHITH REDDY	1111111111	sushith@xyz.com									
*	NULL	NULL	NULL	NULL	NULL									

#	cno	username	cvv	exp_date	nameoncard	card_type
1	1000	SUSHITH	123	2025-12-31	A	VISA
2	1001	SUSHITH	456	2025-12-31	B	RUPAY
3	1002	PARTHIV	789	2025-12-31	C	MASTER CARD
4	1003	PARTHIV	145	2025-12-31	D	AMERICAN EXPRESS
5	1004	ROHITH	567	2025-12-31	E	RUPAY
6	1005	ABHINAV	123	2025-12-31	F	VISA
*	NULL	NULL	NULL	NULL	NULL	NULL

## ADDRESS:

Result Grid		Filter Rows:		Edit:			
#	ad_no	username	hno	street	city	pincode	
1	1	ABHINAV	1-5	E	HYDERABAD	500005	
2	1	PARTHIV	1-3	C	HYDERABAD	500003	
3	1	ROHITH	1-6	F	HYDERABAD	500006	
4	1	SUSHITH	1-1	A	HYDERABAD	500001	
5	2	PARTHIV	1-4	D	HYDERABAD	500004	
6	2	SUSHITH	1-2	B	HYDERABAD	500002	
*	NULL	NULL	NULL	NULL	NULL	NULL	

## CART:

Result Grid		Filter Rows:	
#	username	p_no	quant
1	ABHINAV	3	3
2	ABHINAV	5	1
3	PARTHIV	2	1
4	PARTHIV	4	3
5	PARTHIV	5	4
6	PARTHIV	6	2
7	ROHITH	2	1
8	ROHITH	7	4
9	SUSHITH	1	1
10	SUSHITH	3	2
11	SUSHITH	6	5
12	SUSHITH	8	3
*	NULL	NULL	NULL

## DELIVERY\_SERVICE:

Result Grid		Filter Rows:	
#	ds_id	ds_name	contact
1	1	INDIA POST	indiapost@indiapost.gov.in
2	2	BLUE DART	bluedart@bluedart.com
3	3	FEDEX	fedex@fedex.com
4	4	DHL	dhl@dhl.com
*	NULL	NULL	NULL




## ORDER\_:


Result Grid												
Filter Rows: <input type="text"/>												
Edit: <input type="text"/>												
Export/Import: <input type="text"/>												
Wrap Cell Content: <input type="text"/>												
#	order_id	order_date	order_status	w_no	username	tot_price	gorss_price	discoun	ad_no	ds_id	tracking_id	dstatus
1	1	2020-12-31	SUCCESS	1	SUSHITH	22098	25100	3004	1	1	1	DELIVERED
2	2	2021-01-02	SUCCESS	2	SUSHITH	268	280	12	2	2	2	DELIVERED
3	3	2021-01-05	SUCCESS	2	PARTHIV	531	554	23	1	3	3	DELIVERED
4	4	2021-01-09	SUCCESS	3	PARTHIV	500	525	25	2	4	4	DELIVERED
5	5	2021-01-11	SUCCESS	3	ROHITH	18000	20000	2000	1	1	5	DELIVERED
6	6	2021-01-16	SUCCESS	3	ABHINAV	90	99	9	1	2	6	DELIVERED
7	7	2021-01-19	SUCCESS	1	ABHINAV	1500	200	500	1	3	7	DELIVERED
8	8	2021-01-22	NO STOCK	NULL	SUSHITH	22148	25155	3007	1	NULL	NULL	NULL
9	9	2021-01-25	NO STOCK	NULL	PARTHIV	22136	25142	3006	2	NULL	NULL	NULL
10	10	2021-01-31	PAYMENT FAILED	NULL	ROHITH	18000	20000	2000	1	NULL	NULL	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL


## ORDER\_ITEM:

Result Grid			
Filter Rows: <input type="text"/>			
#	order_id	p_no	quantity
1	1	1	1
2	1	3	2
3	2	4	4
4	3	3	1
5	3	7	3
6	4	8	5
7	5	2	1
8	6	6	3
9	7	5	3
10	8	1	1
11	8	3	1
12	8	8	1
13	9	1	1
14	9	4	1
15	9	7	1
16	10	2	1
*	NULL	NULL	NULL

PAYMENT:

Result Grid 

Filter Rows: 

Edit: 

#	payment_id	payment_status	amount	cno	order_id
1	1	SUCCESS	22098	1000	1
2	2	SUCCESS	268	1001	2
3	3	SUCCESS	531	1002	3
4	4	SUCCESS	500	1003	4
5	5	SUCCESS	18000	1004	5
6	6	SUCCESS	90	1005	6
7	7	SUCCESS	1500	1005	7
8	8	INSUFFICIENT FUNDS	18000	1004	10
*	NULL	NULL	NULL	NULL	NULL