DBMS PROJECT

PROJECT NAME:	Enquiry Transfer System
TEAM MEMBERS:	NEELA SAI(H1) REDDY SWARTIH REDDY(J5) KUMMARI SHIVA CHARAN (LE16)

Introduction

In the rapidly evolving digital landscape, ecommerce platforms have revolutionized the way we shop, offering unmatched convenience and an extensive range of products. To ensure these platforms operate seamlessly, robust data management systems are essential. This project focuses on developing a comprehensive Database Management System (DBMS) for an e-commerce site, aimed at efficiently managing and integrating various aspects of the platform.

The core components of this DBMS include:

1. **Users**: Storing detailed personal data such as user IDs, names, phone numbers, email addresses, and physical addresses.
2. **Items**: Tracking all items available on the site, including item IDs, names, prices, stock quantities, and ratings.
3. **Orders**: Recording each order placed by users, with details like order IDs, user IDs, item IDs, order dates, quantities sold, and total amounts.
4. **Memberships**: Monitoring the memberships applied for by users, including membership IDs, user IDs, and membership expiry dates.
5. **Ratings**: Logging ratings given by users to staff members, including user IDs, staff IDs, rating scores, and timestamps.
6. **Staff**: Storing information about staff members, including staff IDs, names, departments, and salaries.

Working of the DBMS

1. **User Management**:
    - **Registration**: New users register on the platform by providing personal details. This information is stored in the user's table.
    - **Authentication**: The system verifies user credentials during login to ensure secure access.
2. **Item Management**:
    - **Inventory Tracking**: The item table maintains records of all items, including their stock levels. Updates are made whenever new items are added or stock levels change.
    - **Price and Ratings**: Each item's price and user ratings are stored in the item table, providing essential details for users before making a purchase.
3. **Order Processing**:
    - **Order Placement**: Users place orders, which are recorded in the orders table with details such as order date, items purchased, quantity, and total amount.
    - **Order Fulfillment**: Inventory levels in the item table are updated based on the quantity sold.
4. **Membership Management**:
    - **Membership Application**: Users apply for memberships recorded in the membership table, tracking the validity of each membership.
    - **Expiry Tracking**: The system monitors membership expiry dates and notifies users when renewal is due.

5. **Rating and Feedback**:
    - **Rating Submission**: Users rate staff members based on their interactions. These ratings are stored in the rating table with timestamps.
    - **Quality Assurance**: Staff ratings help assess the performance and service quality provid ed by staff members.
6. **Staff Management**:
    - **Staff Information**: Details of staff members, including their department and salary, are s tored in the staff table.
    - **Performance Tracking**: Staff ratings from users are linked to their records, enabling the system to evaluate their performance.

User:

- **user_id**: An integer that serves as the primary key and automatically increments with each new entry.
- **user_name**: A variable character string to store the user's name.
- **phone_no**: A variable character string for the phone number, which can include special characters (e.g., +, -, spaces).
- **g mail**: A variable character string for the email address (you might want to consider a more generic name like email).
- **address**: A variable character string for the user's address

Item:

- **item_id**: An integer that serves as the primary key and automatically increments with each new item.
- **item_name**: A variable character string to store the item's name.
- **price**: A decimal type to represent the item's price, allowing for two decimal places.
- **stock**: An integer to track the available quantity of the item.
- **rating**: An integer for the item's rating, which can represent a score (e.g., 1 to 5).

Order:

- **order_id**: An integer that serves as the primary key and automatically increments with each new order.
- **user_id**: An integer that acts as a foreign key referencing the user_idin the userstable.
- **bill_date**: A date time field to record when the order was placed.
- **item_id**: An integer that acts as a foreign key referencing the item_idin the itemstable.
- **quantity_sold**: An integer to track the number of items sold in the order.
- **total_amount**: An integer representing the total amount for the order

Staff:

- **staff_id**: An integer that serves as the primary key and automatically increments with each new staff member.
- **staff_name**: A variable character string to store the staff member's name.
- **department**: A variable character string to specify the department where the staff member works.
- **salary**: An integer to represent the staff member's salary.
- **rating**: An integer to indicate the staff member's performance rating.

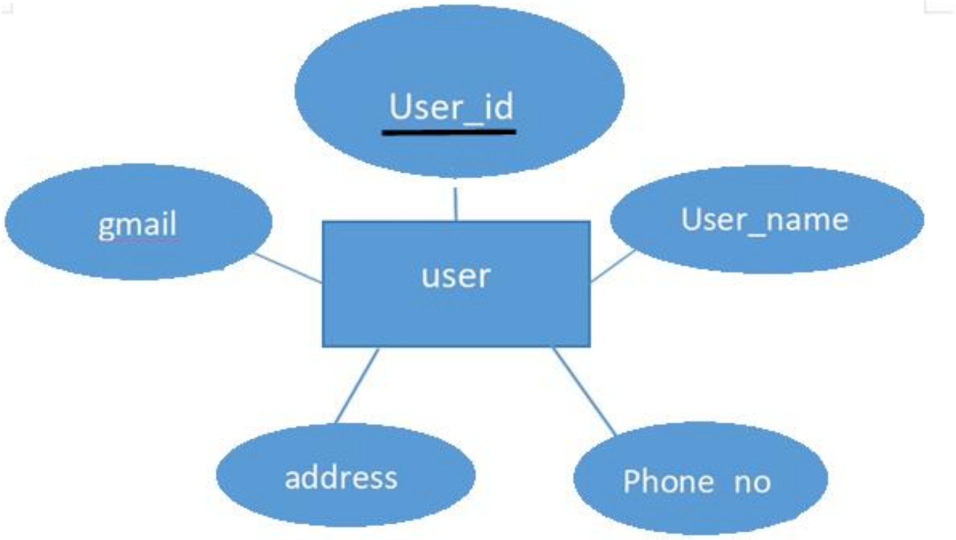
Membership:

- **mem_id**: An integer that serves as the primary key and automatically increments for each new membership.
- **user_id**: An integer that acts as a foreign key referencing the user_idin the userstable.
- **valid_till**: A date time field that defaults to one year from the current date and time, representing the membership's expiration date.

Rating:

- **cus_id**: An integer that acts as a foreign key referencing the user_idin the userstable.
- **to_staff**: An integer that acts as a foreign key referencing the staff_idin the stafftable.
- **rating**: An integer representing the rating given by the customer.
- **timestamp**: A timestamp field that defaults to the current date and time, indicating when the feedback was given.

ER-DIAGRAMS: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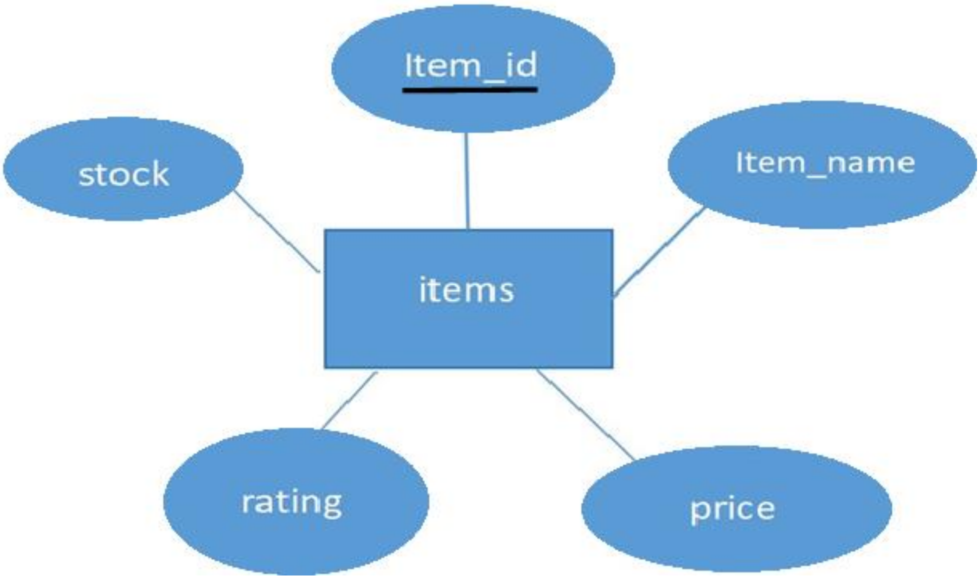
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Item_name
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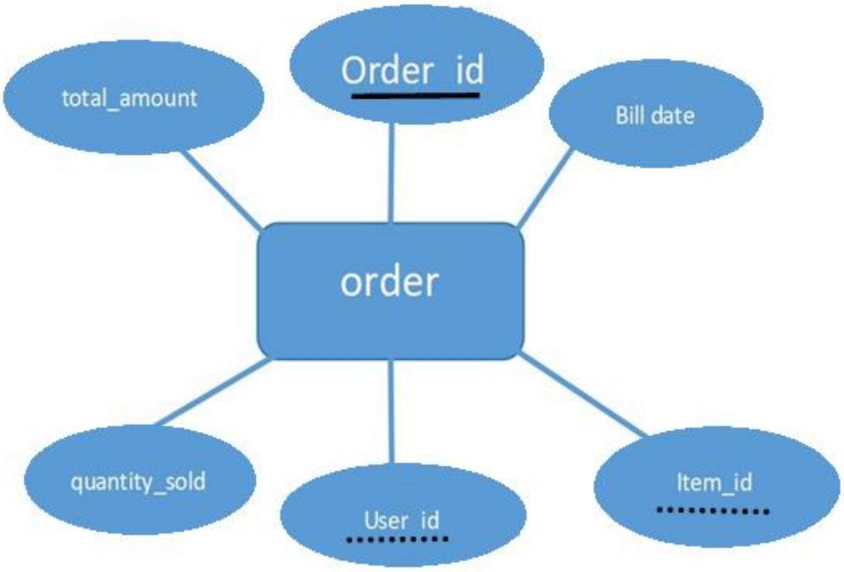
price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Bill date
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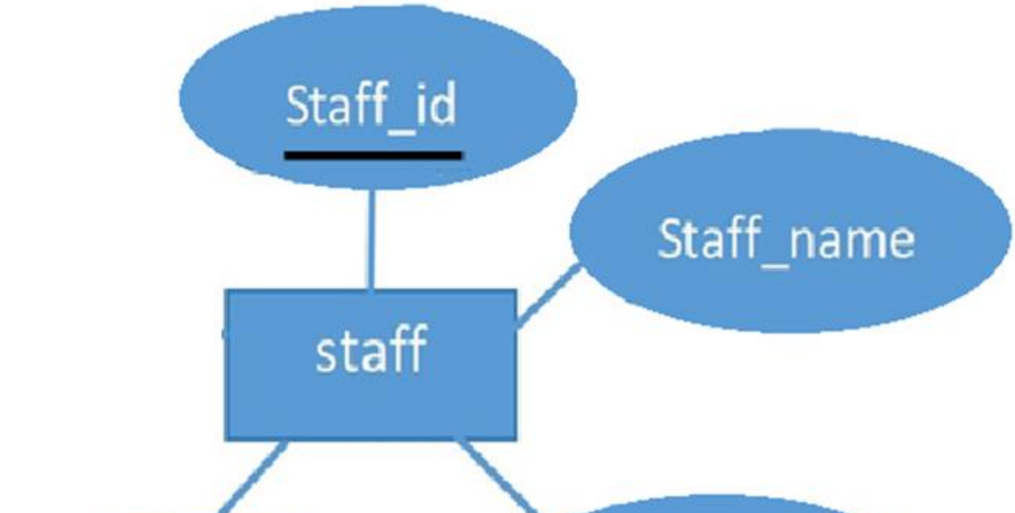
User_id
Item_id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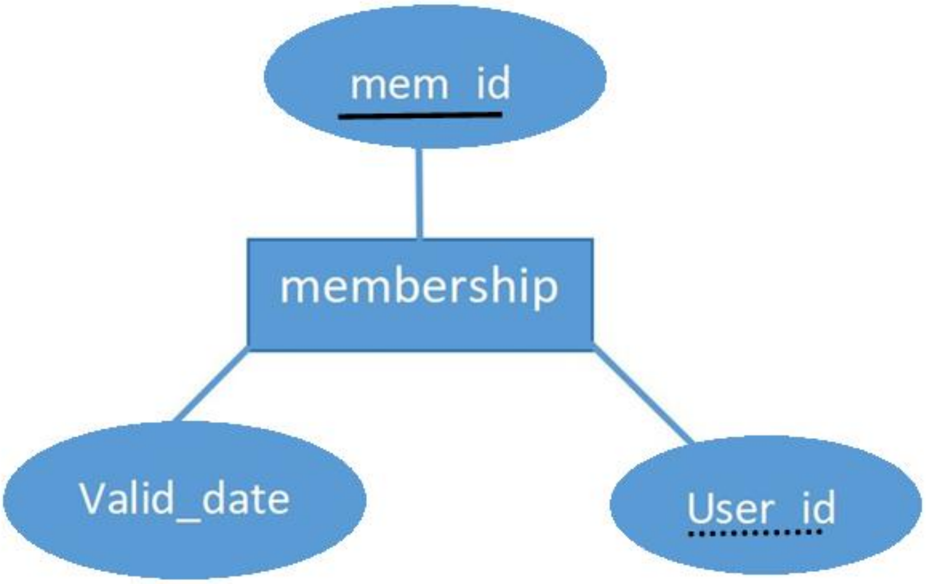
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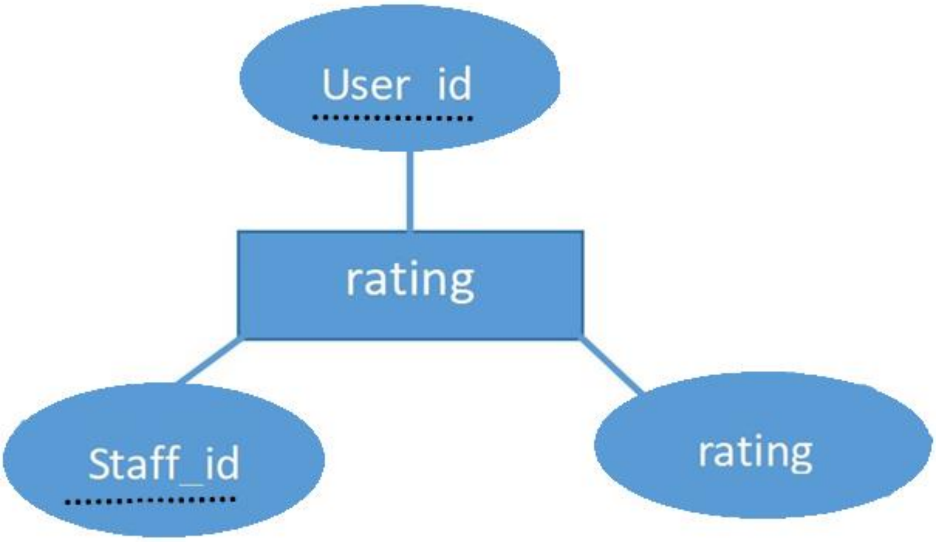
User_id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Staff_id
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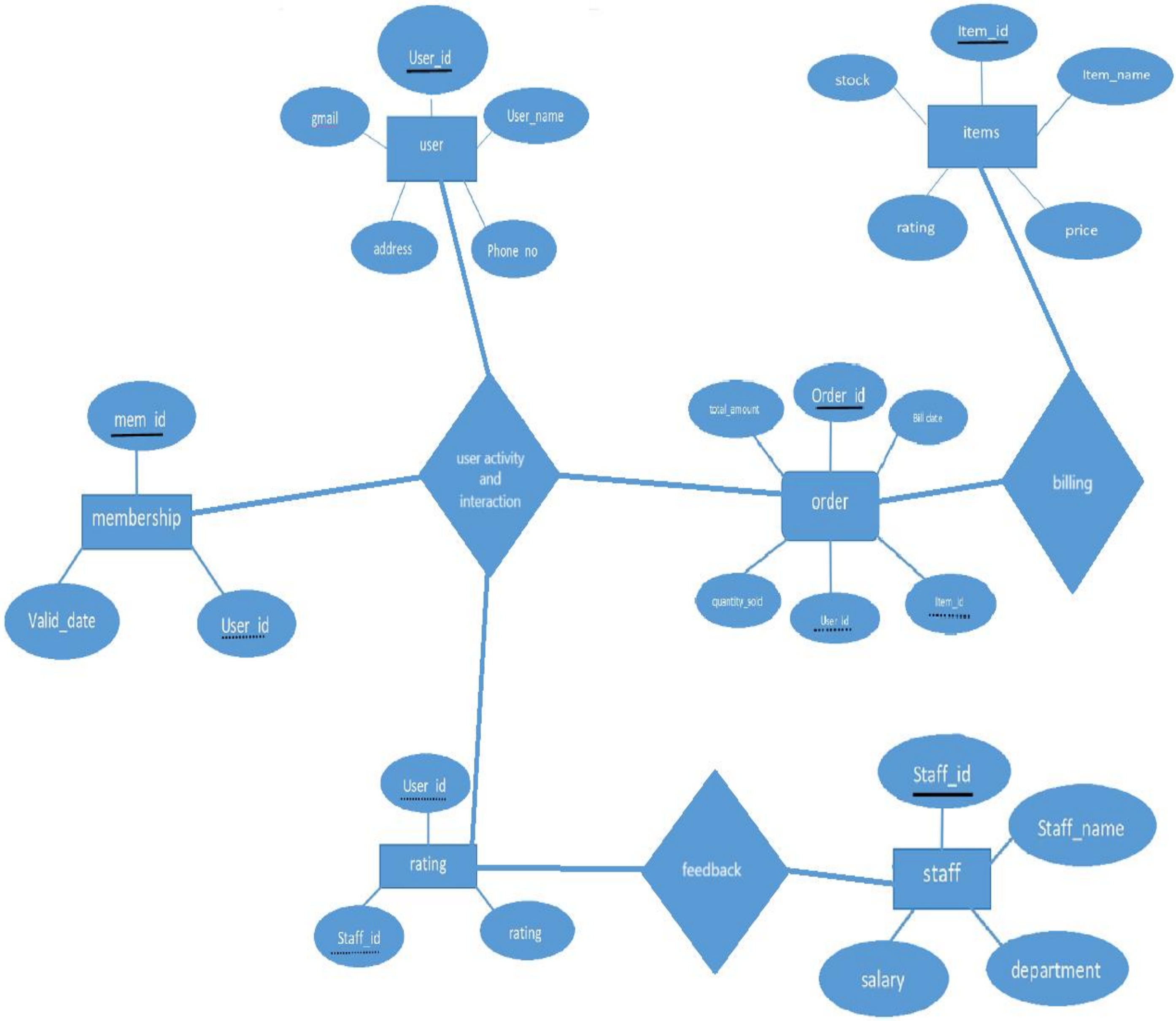
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address
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Item_id
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Item_name
items
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price
mem id
membership
Valid_date
User_id
user activity
and
interaction
total_amount
Order id
Bill date
order
billing
quantity_sold
User id
Item_id
User id
rating
Staff_id
rating
feedback
Staff_id
Staff_name
staff
salary
department

E-COMMERCE ENQUIRY DATABASE

TABLES:

1. USERS [user_id, user_name, phone_no, g mail, address]

2. ITEMS [item_id, item_name, price, stock, rating]

3. ORDERS [order_id, user_id, bill_date, item_id, quantity_sold, total_amount]

4. STAFF [staff_id, staff_name,department, salary, rating]

5. MEMBERSHIP [mem_id,user_id, valid_till]

6. RATING [cus_id, to_staff, rating, timestamp]

user_id	user_name	phone_no	g mail	address
Int primary key, auto increment	var-char	var char	var char	var char
item_id	item_name	price	stock	Rating
Int Primary key, auto-increment	var char	int	int	Int

order_id,	user_id,	bill_date,	item_id,	quantity_sold,	Total_amount
Int primary key auto-increment	Int foreign key	Date-time	Int foreign key	int	Int

[staff_id,	staff_name,	department,	salary,	Rating
Int primary key auto increment	var char	var char	int	int

mem_id,	user_id,	valid_till
Int auto-increment	Int foreign key	Date-time(to be set using function)

cus_id,	to_staff,	rating,	timestamp
Int foreign key	Int foriegn key	int	timestamp

1. Display the items ordered by the user along with total amount andaddress to deliver where user id=5;
2. Display the ratings given by the user to the staff;
3. Display the staff details whose rating is greater than 4;
4. Display the items which are available to the users along with cost;
5. Display the items which are deliver on date 20-05-2024;
6. Display the items whose rating is greater than 4;
7. Display the staff names along with their ids whose salary is greater than50000;
8. Display the items id and item names whose letter starts with letter ‘s’;
9. Create a view which contains the all staff details along with rating ;
10. Create a view of the items which are available in the stock along withprice and quantity;

DATABASE:

```
create database dbms;
use dbms;
CREATE TABLE users (
      user_id INT PRIMARY KEY,
      user_name VARCHAR(100),
      phno INT UNIQUE,
      gmail VARCHAR(100),
      address VARCHAR(255)
);
CREATE TABLE item (
      item_id INT PRIMARY KEY,
      item_name VARCHAR(100) UNIQUE,
      price INT,
      stockINT,
      ratingINT
);
  CREATE TABLE orders (
      order_id INT PRIMARY KEY,
      user_id INT,
      item_id INT,
      bill_date DATE,
      qty_sold INT,
      tot_amt INT,
      FOREIGN KEY (user_id) REFERENCES users(user_id),
      FOREIGN KEY (item_id) REFERENCES item(item_id)
);
  CREATE TABLE membership (
      m_id INT PRIMARY KEY,
      user_id INT,
      valid_till DATE,
      FOREIGN KEY (user_id) REFERENCES users(user_id)
);
  CREATE TABLE rating(
      user_id  INT,
      staff_id INT,
      rating INT,
      timeDATE
      ,
      PRIMARY KEY (user_id, staff_id),
    FOREIGN KEY (user_id) REFERENCES users(user_id),
    FOREIGN KEY (staff_id) REFERENCES staff(staff_id)
);
CREATE TABLE staff (
    staff_id INT PRIMARY KEY,
    staff_name VARCHAR(100),dept
    VARCHAR(100),
    sal INT
);
show tables;
INSERT INTO users (user_id, user_name, phno, gmail, address) VALUES(1, 'John Doe',
1234567890, 'john@example.com', '123 Main St'),
(2, 'Jane Smith', 1234567891, 'jane@example.com', '456 Maple St'),
(3, 'Alice Johnson', 1234567892, 'alice@example.com', '789 Oak St'),
(4, 'Bob Brown', 1234567893, 'bob@example.com', '101 Pine St'),
(5, 'Carol White', 1234567894, 'carol@example.com', '202 Birch St'),
(6, 'David Green', 1234567895, 'david@example.com', '303 Cedar St'),
(7, 'Eve Black', 1234567896, 'eve@example.com', '404 Elm St'),
(8, 'Frank Wilson', 1234567897, 'frank@example.com', '505 Spruce St'),
(9, 'Grace Taylor', 1234567898, 'grace@example.com', '606 Willow St'),
(10, 'Hank Martinez', 1234567899, 'hank@example.com', '707 Fir St'),
(11, 'Ivy Lewis', 1234567880, 'ivy@example.com', '808 Cypress St'),
(12, 'Jack Lee', 1234567881, 'jack@example.com', '909 Redwood St'),
(13, 'Kara Clark', 1234567882, 'kara@example.com', '1010 Sequoia St'),
(14, 'Liam Walker', 1234567883, 'liam@example.com', '1111 MagnoliaSt'),
(15, 'Mia Hill', 1234567884, 'mia@example.com', '1212 Palm St'),
(16, 'Noah Scott', 1234567885, 'noah@example.com', '1313 Bay St'),
(17, 'Olivia Adams', 1234567886, 'olivia@example.com', '1414 HickorySt'),
(18, 'Paul Evans', 1234567887, 'paul@example.com', '1515 Poplar St'),
(19, 'Quincy Harris', 1234567888, 'quincy@example.com', '1616Cottonwood St'),
(20, 'Rachel Carter', 1234567889, 'rachel@example.com', '1717Sycamore St');

INSERT INTO item (item_id, item_name, price, stock, rating) VALUES(1, 'Laptop',
1000, 50, 4),
(2, 'Mouse', 20, 200, 5),
(3, 'Keyboard', 50, 150, 4),
(4, 'Monitor', 200, 75, 5),
(5, 'Printer', 150, 40, 3),
(6, 'Tablet', 300, 60, 4),
(7, 'Smartphone', 600, 80, 5),
(8, 'Headphones', 100, 120, 4),
(9, 'Speaker', 80, 90, 5),
(10, 'Camera', 500, 30, 4),
(11, 'Webcam', 70, 100, 4),
(12, 'Microphone', 60, 85, 3),
(13, 'Charger', 30, 150, 4),
(14, 'Power Bank', 40, 120, 4),
(15, 'USB Drive', 10, 300, 5),
(16, 'External HDD', 80, 70, 4),
(17, 'Router', 90, 45, 4),
(18, 'Projector', 400, 25, 3),
(19, 'Smartwatch', 200, 65, 5),
(20, 'Fitness Tracker', 100, 110, 4);

INSERT INTO orders (order_id, user_id, item_id, bill_date, qty_sold,tot_amt)
VALUES
(1, 1, 1, '2024-10-01', 1, 1000),
(2, 2, 2, '2024-10-02', 2, 40),
(3, 3, 3, '2024-10-03', 3, 150),
(4, 4, 4, '2024-10-04', 1, 200),
(5, 5, 5, '2024-10-05', 1, 150),
(6, 6, 6, '2024-10-06', 2, 600),
(7, 7, 7, '2024-10-07', 1, 600),
(8, 8, 8, '2024-10-08', 3, 300),
(9, 9, 9, '2024-10-09', 1, 80),
(10, 10, 10, '2024-10-10', 1, 500),
(11, 11, 11, '2024-10-11', 2, 140),
(12, 12, 12, '2024-10-12', 1, 60),
(13, 13, 13, '2024-10-13', 3, 90),
(14, 14, 14, '2024-10-14', 1, 40),
(15, 15, 15, '2024-10-15', 4, 40),
(16, 16, 16, '2024-10-16', 2, 160),
(17, 17, 17, '2024-10-17', 1, 90),
(18, 18, 18, '2024-10-18', 1, 400),
(19, 19, 19, '2024-10-19', 3, 600),
(20, 20, 20, '2024-10-20', 2, 200);
```

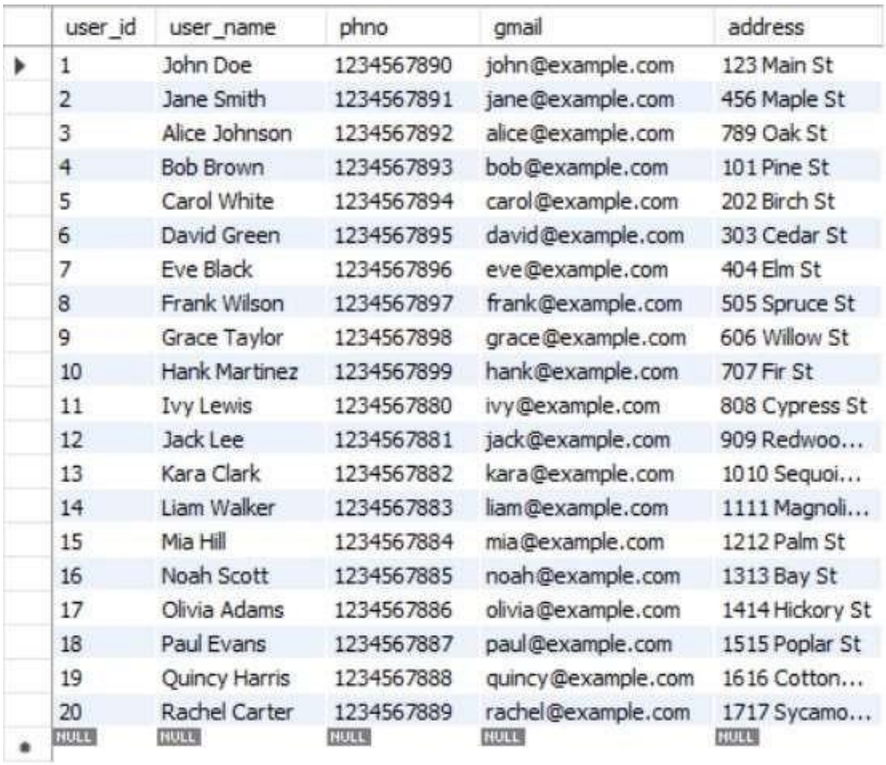
```
INSERT INTO membership (m_id, user_id, valid_till) VALUES(1, 1, '2025-10-01'),
(2, 2, '2025-10-02'),
(3, 3, '2025-10-03'),
(4, 4, '2025-10-04'),
(5, 5, '2025-10-05'),
(6, 6, '2025-10-06'),
(7, 7, '2025-10-07'),
(8, 8, '2025-10-08'),
(9, 9, '2025-10-09'),
(10, 10, '2025-10-10'),
(11, 11, '2025-10-11'),
(12, 12, '2025-10-12'),
(13, 13, '2025-10-13'),
(14, 14, '2025-10-14'),
(15, 15, '2025-10-15'),
(16, 16, '2025-10-16'),
(17, 17, '2025-10-17'),
(18, 18, '2025-10-18'),
(19, 19, '2025-10-19'),
(20, 20, '2025-10-20');

INSERT INTO rating (user_id, staff_id, rating, time) VALUES(1, 1, 5, '2024-10-01'),
(2, 2, 4, '2024-10-02'),
(3, 3, 5, '2024-10-03'),
(4, 4, 4, '2024-10-04'),
(5, 5, 3, '2024-10-05'),
(6, 6, 5, '2024-10-06'),
(7, 7, 4, '2024-10-07'),
(8, 8, 5, '2024-10-08'),
(9, 9, 4, '2024-10-09'),
(10, 10, 3, '2024-10-10'),
(11, 11, 5, '2024-10-11'),
(12, 12, 4, '2024-10-12'),
(13, 13, 5, '2024-10-13'),
(14, 14, 3, '2024-10-14'),
(15, 15, 4, '2024-10-15'),
(16, 16, 5, '2024-10-16'),
(17, 17, 4, '2024-10-17'),
(18, 18, 5, '2024-10-18'),
(19, 19, 3, '2024-10-19'),
(20, 20, 4, '2024-10-20');

INSERT INTO staff (staff_id, staff_name, dept, sal) VALUES(1, 'Alice',
'Sales', 50000),
(2, 'Bob', 'Support', 45000),
(3, 'Charlie', 'Development', 60000),
(4, 'Dana', 'Marketing', 55000),
(5, 'Eli', 'HR', 48000),
(6, 'Faith', 'Finance', 53000),
(7, 'Gabe', 'Support', 47000),
(8, 'Hank', 'Sales', 52000),
(9, 'Ivy', 'Development', 61000),
(10, 'Jack', 'Marketing', 54000),
(11, 'Kara', 'HR', 49000),
(12, 'Liam', 'Finance', 52000),
(13, 'Mia', 'Support', 47000),
(14, 'Nina', 'Sales', 53000),
(15, 'Owen', 'Development', 60000),
(16, 'Paul', 'Marketing', 56000),
(17, 'Quinn', 'HR', 50000),
(18, 'Ruth', 'Finance', 54000),
(19, 'Steve', 'Support', 46000),
(20, 'Tina', 'Sales', 52000);

-- Display data from users table
SELECT * FROM users;

-- Display data from item table
SELECT * FROM item;

-- Display data from orders table
SELECT * FROM orders;

-- Display data from membership table
SELECT * FROM membership;

-- Display data from rating table
```

```
SELECT * FROM rating;

-- Display data from staff table
SELECT * FROM staff;

-- 1
SELECT o.item_id, i.item_name, o.tot_amt, u.addressFROM orders o
JOIN item i ON o.item_id = i.item_id JOIN users
u ON o.user_id = u.user_idWHERE o.user_id =5;
-- 2
SELECT r.staff_id, s.staff_name, r.rating, r.time
FROM rating r
JOIN staff s ON r.staff_id = s.staff_id
WHERE r.user_id = 5;
-- 3
SELECT s.staff_id, s.staff_name, s.dept, s.sal
FROM staff s
JOIN rating r ON s.staff_id = r.staff_id
WHERE r.rating > 4;
-- 4
SELECT item_id, item_name, price
FROM item
WHERE stock > 0;
-- 5
SELECT o.item_id, i.item_name
FROM orders o
JOIN item i ON o.item_id = i.item_id
WHERE o.bill_date >= '2024-10-10';
-- 6
SELECT item_id, item_name
FROM item
WHERE rating > 4;
-- 7
SELECT staff_id, staff_name
FROM staff
WHERE sal > 50000;
-- 8
SELECT item_id, item_name
```

```
FROM item
WHERE item_name LIKE 'S%';
-- 9
CREATE VIEW staff_details_with_rating AS
SELECT s.staff_id, s.staff_name, s.dept, s.sal, r.rating
FROM staff s
JOIN rating r ON s.staff_id = r.staff_id;
-- 10
CREATE VIEW available_items  AS
SELECT item_id, item_name, price, stock
FROM item
WHERE stock > 0;
```

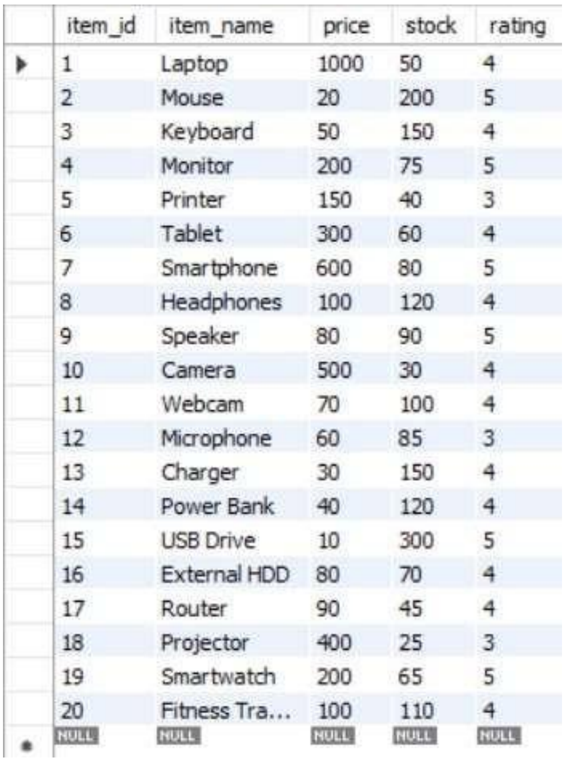
OUTPUTS:

USER TABLE:



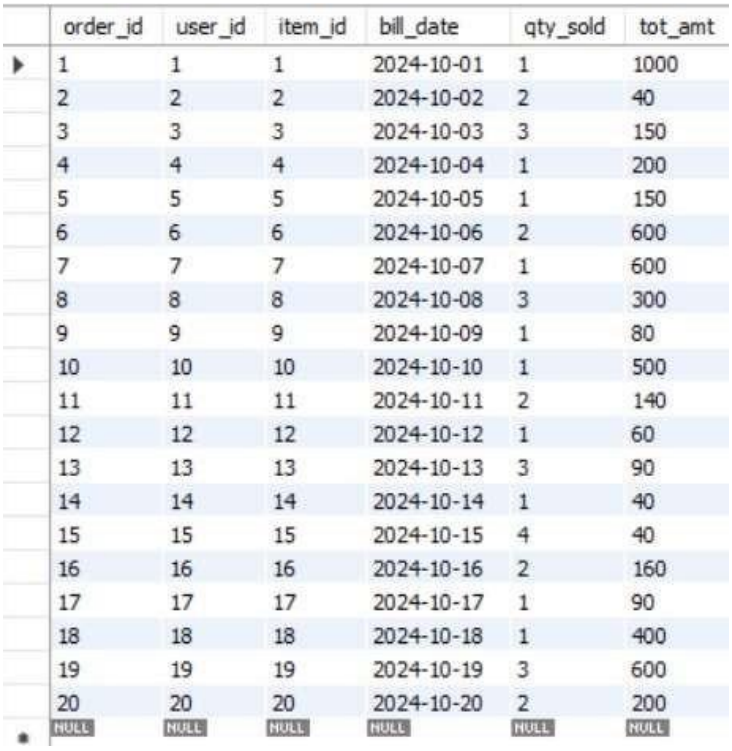
	user_id	user_name	phno	gmail	address
▶	1	John Doe	1234567890	john@example.com	123 Main St
	2	Jane Smith	1234567891	jane@example.com	456 Maple St
	3	Alice Johnson	1234567892	alice@example.com	789 Oak St
	4	Bob Brown	1234567893	bob@example.com	101 Pine St
	5	Carol White	1234567894	carol@example.com	202 Birch St
	6	David Green	1234567895	david@example.com	303 Cedar St
	7	Eve Black	1234567896	eve@example.com	404 Elm St
	8	Frank Wilson	1234567897	frank@example.com	505 Spruce St
	9	Grace Taylor	1234567898	grace@example.com	606 Willow St
	10	Hank Martinez	1234567899	hank@example.com	707 Fir St
	11	Ivy Lewis	1234567880	ivy@example.com	808 Cypress St
	12	Jack Lee	1234567881	jack@example.com	909 Redwoo...
	13	Kara Clark	1234567882	kara@example.com	1010 Sequoi...
	14	Liam Walker	1234567883	liam@example.com	1111 Magnoli...
	15	Mia Hill	1234567884	mia@example.com	1212 Palm St
	16	Noah Scott	1234567885	noah@example.com	1313 Bay St
	17	Olivia Adams	1234567886	olivia@example.com	1414 Hickory St
	18	Paul Evans	1234567887	paul@example.com	1515 Poplar St
	19	Quincy Harris	1234567888	quincy@example.com	1616 Cotton...
	20	Rachel Carter	1234567889	rachel@example.com	1717 Sycamo...
●	NULL	NULL	NULL	NULL	NULL

ITEM TABLE:



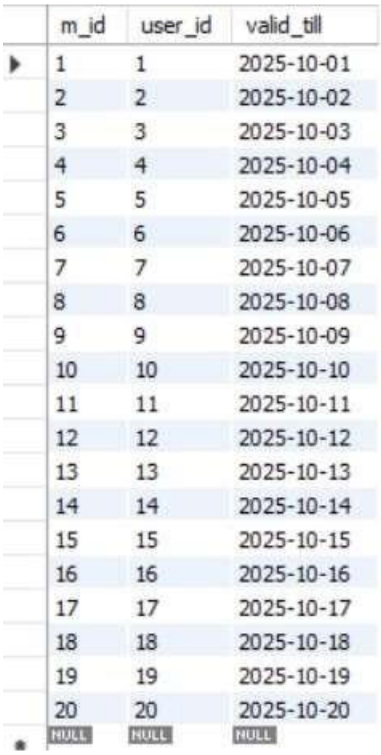
item_id	item_name	price	stock	rating
1	Laptop	1000	50	4
2	Mouse	20	200	5
3	Keyboard	50	150	4
4	Monitor	200	75	5
5	Printer	150	40	3
6	Tablet	300	60	4
7	Smartphone	600	80	5
8	Headphones	100	120	4
9	Speaker	80	90	5
10	Camera	500	30	4
11	Webcam	70	100	4
12	Microphone	60	85	3
13	Charger	30	150	4
14	Power Bank	40	120	4
15	USB Drive	10	300	5
16	External HDD	80	70	4
17	Router	90	45	4
18	Projector	400	25	3
19	Smartwatch	200	65	5
20	Fitness Tra...	100	110	4
NULL	NULL	NULL	NULL	NULL

ORDER TABLE:



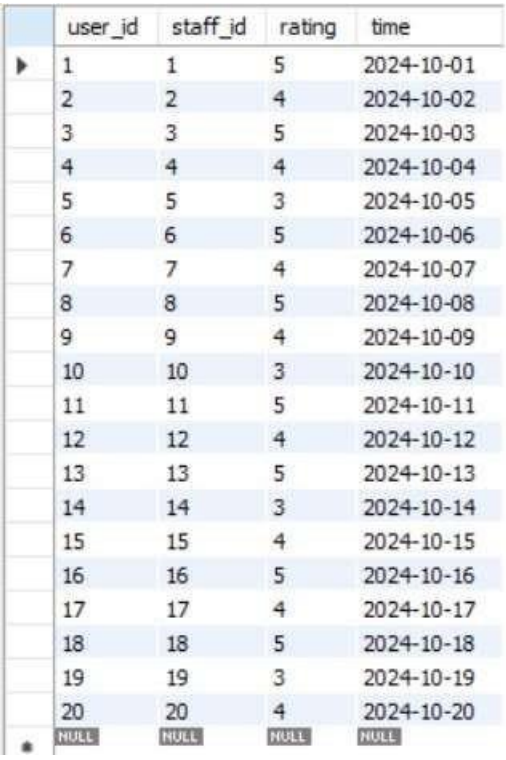
order_id	user_id	item_id	bill_date	qty_sold	tot_amt
1	1	1	2024-10-01	1	1000
2	2	2	2024-10-02	2	40
3	3	3	2024-10-03	3	150
4	4	4	2024-10-04	1	200
5	5	5	2024-10-05	1	150
6	6	6	2024-10-06	2	600
7	7	7	2024-10-07	1	600
8	8	8	2024-10-08	3	300
9	9	9	2024-10-09	1	80
10	10	10	2024-10-10	1	500
11	11	11	2024-10-11	2	140
12	12	12	2024-10-12	1	60
13	13	13	2024-10-13	3	90
14	14	14	2024-10-14	1	40
15	15	15	2024-10-15	4	40
16	16	16	2024-10-16	2	160
17	17	17	2024-10-17	1	90
18	18	18	2024-10-18	1	400
19	19	19	2024-10-19	3	600
20	20	20	2024-10-20	2	200
NULL	NULL	NULL	NULL	NULL	NULL

MEMBERSHIP TABLE:



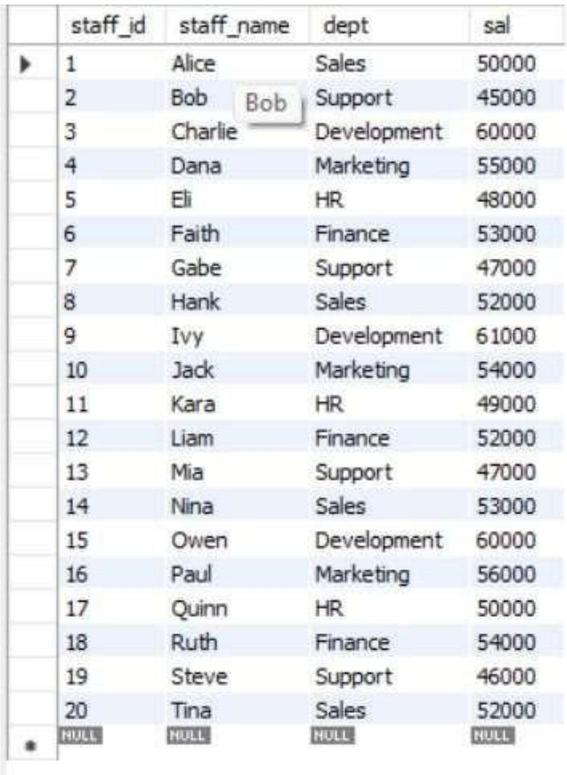
m_id	user_id	valid_till
1	1	2025-10-01
2	2	2025-10-02
3	3	2025-10-03
4	4	2025-10-04
5	5	2025-10-05
6	6	2025-10-06
7	7	2025-10-07
8	8	2025-10-08
9	9	2025-10-09
10	10	2025-10-10
11	11	2025-10-11
12	12	2025-10-12
13	13	2025-10-13
14	14	2025-10-14
15	15	2025-10-15
16	16	2025-10-16
17	17	2025-10-17
18	18	2025-10-18
19	19	2025-10-19
20	20	2025-10-20
NULL	NULL	NULL

RATING TABLE:



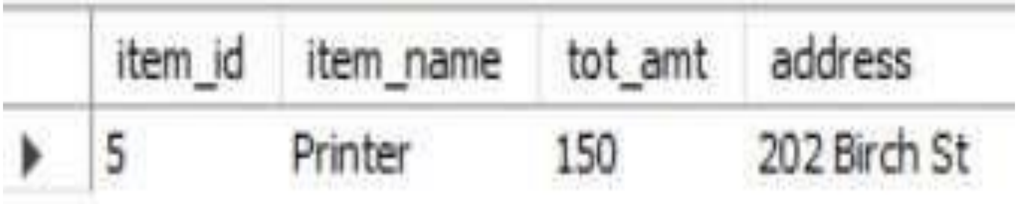
user_id	staff_id	rating	time
1	1	5	2024-10-01
2	2	4	2024-10-02
3	3	5	2024-10-03
4	4	4	2024-10-04
5	5	3	2024-10-05
6	6	5	2024-10-06
7	7	4	2024-10-07
8	8	5	2024-10-08
9	9	4	2024-10-09
10	10	3	2024-10-10
11	11	5	2024-10-11
12	12	4	2024-10-12
13	13	5	2024-10-13
14	14	3	2024-10-14
15	15	4	2024-10-15
16	16	5	2024-10-16
17	17	4	2024-10-17
18	18	5	2024-10-18
19	19	3	2024-10-19
20	20	4	2024-10-20
NULL	NULL	NULL	NULL

STAFF TABLE:



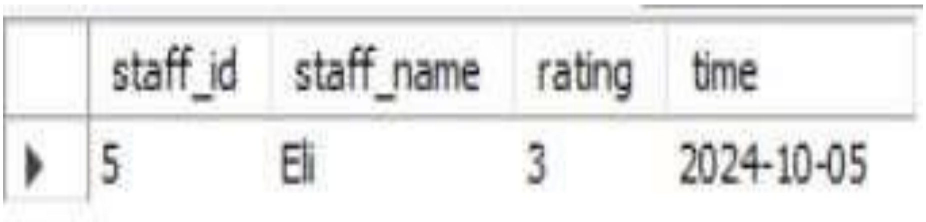
staff_id	staff_name	dept	sal
1	Alice	Sales	50000
2	Bob	Support	45000
3	Charlie	Development	60000
4	Dana	Marketing	55000
5	Eli	HR	48000
6	Faith	Finance	53000
7	Gabe	Support	47000
8	Hank	Sales	52000
9	Ivy	Development	61000
10	Jack	Marketing	54000
11	Kara	HR	49000
12	Liam	Finance	52000
13	Mia	Support	47000
14	Nina	Sales	53000
15	Owen	Development	60000
16	Paul	Marketing	56000
17	Quinn	HR	50000
18	Ruth	Finance	54000
19	Steve	Support	46000
20	Tina	Sales	52000
NULL	NULL	NULL	NULL

Display the items ordered by the user along with totalamount and address to deliver where item id=5;



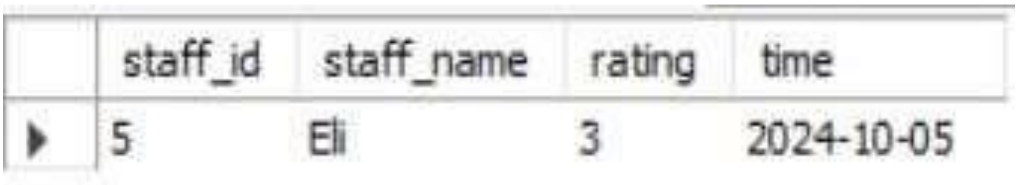
item_id	item_name	tot_amt	address
5	Printer	150	202 Birch St

Display the ratings given by the user to the staff whsoestaff_id=5;



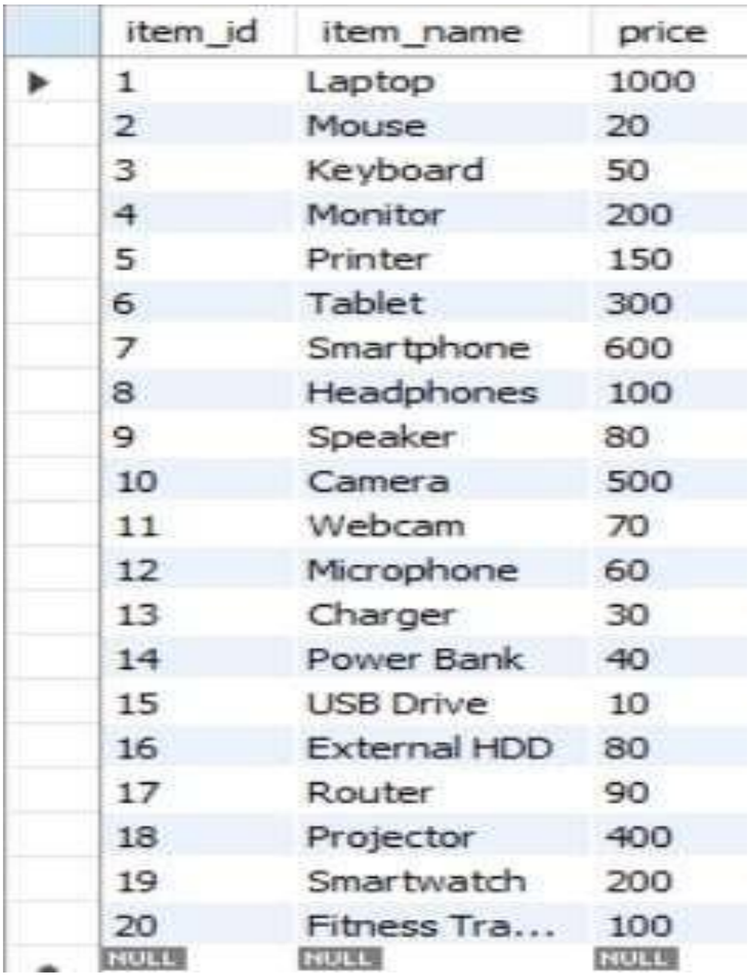
staff_id	staff_name	rating	time
5	Eli	3	2024-10-05

Display the staff details whose rating is greater than 4;



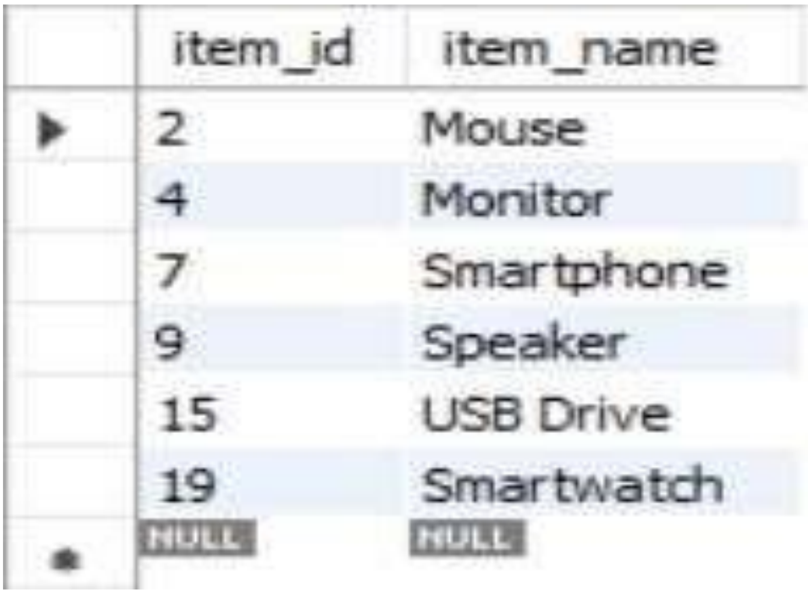
staff_id	staff_name	rating	time
5	Eli	3	2024-10-05

Display the items which are available to the users alongwith cost;



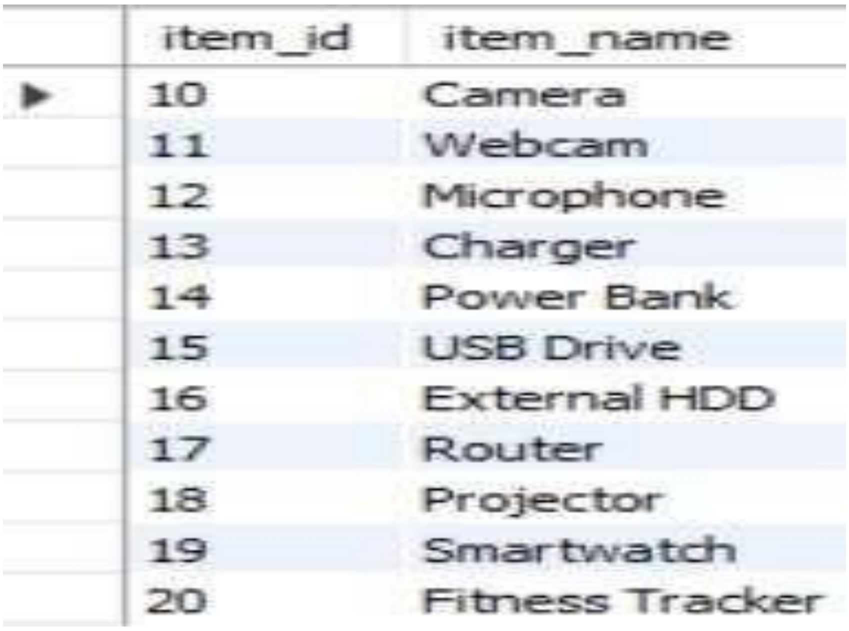
item_id	item_name	price
1	Laptop	1000
2	Mouse	20
3	Keyboard	50
4	Monitor	200
5	Printer	150
6	Tablet	300
7	Smartphone	600
8	Headphones	100
9	Speaker	80
10	Camera	500
11	Webcam	70
12	Microphone	60
13	Charger	30
14	Power Bank	40
15	USB Drive	10
16	External HDD	80
17	Router	90
18	Projector	400
19	Smartwatch	200
20	Fitness Tra...	100
NULL	NULL	NULL

. Display the items which are deliver on date 20-05-2024;



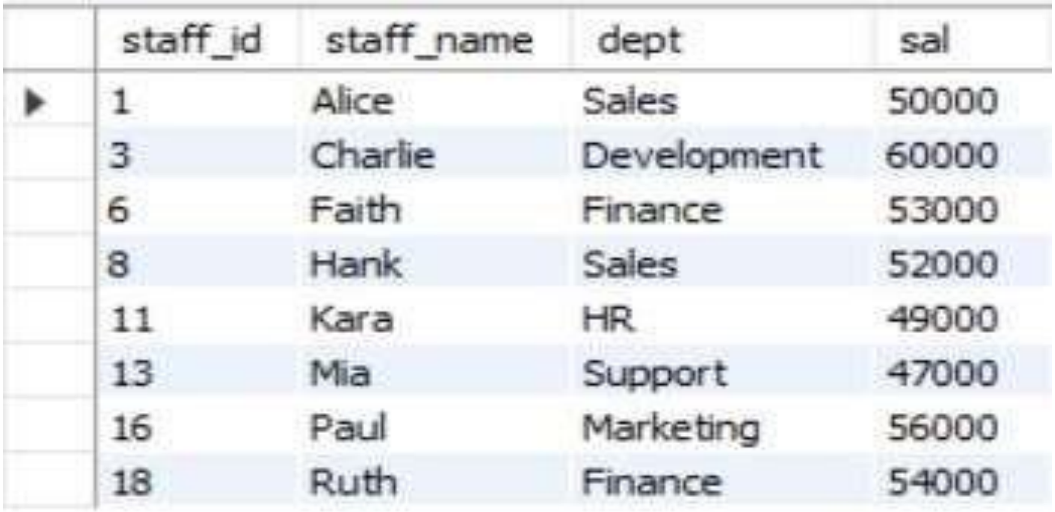
item_id	item_name
2	Mouse
4	Monitor
7	Smartphone
9	Speaker
15	USB Drive
19	Smartwatch
NULL	NULL

Display the items whose rating is greater than 4;



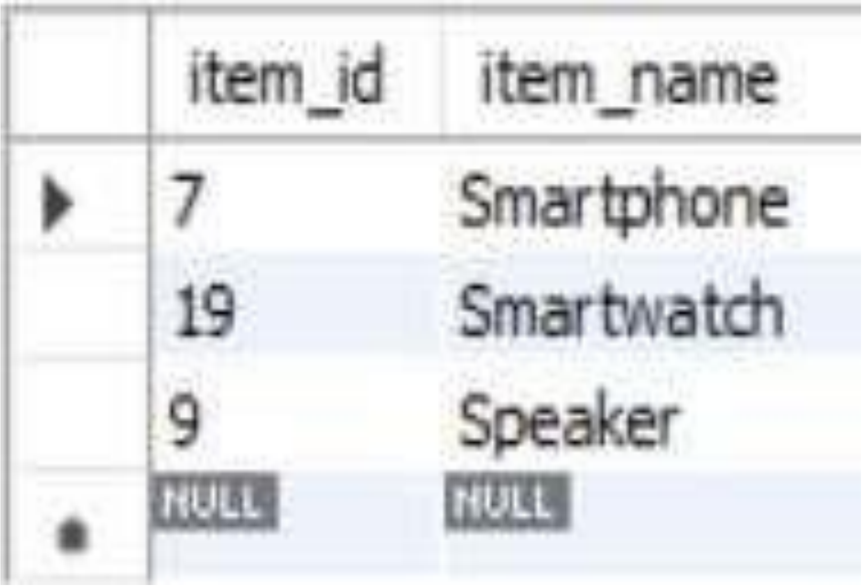
item_id	item_name
10	Camera
11	Webcam
12	Microphone
13	Charger
14	Power Bank
15	USB Drive
16	External HDD
17	Router
18	Projector
19	Smartwatch
20	Fitness Tracker

. Display the staff names along with their ids whose salaryis greater than 50000;



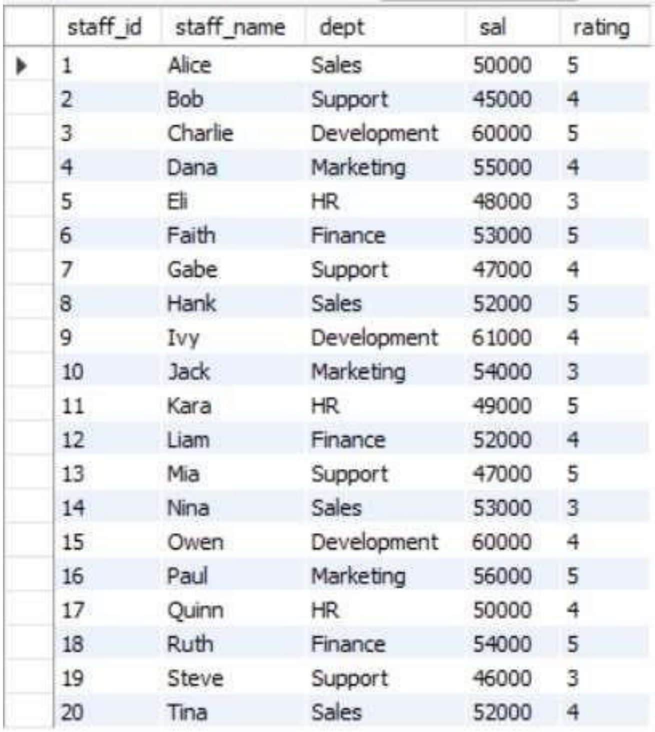
	staff_id	staff_name	dept	sal
▶	1	Alice	Sales	50000
	3	Charlie	Development	60000
	6	Faith	Finance	53000
	8	Hank	Sales	52000
	11	Kara	HR	49000
	13	Mia	Support	47000
	16	Paul	Marketing	56000
	18	Ruth	Finance	54000

Display the items id and item names whose letter startswith letter ‘s’;



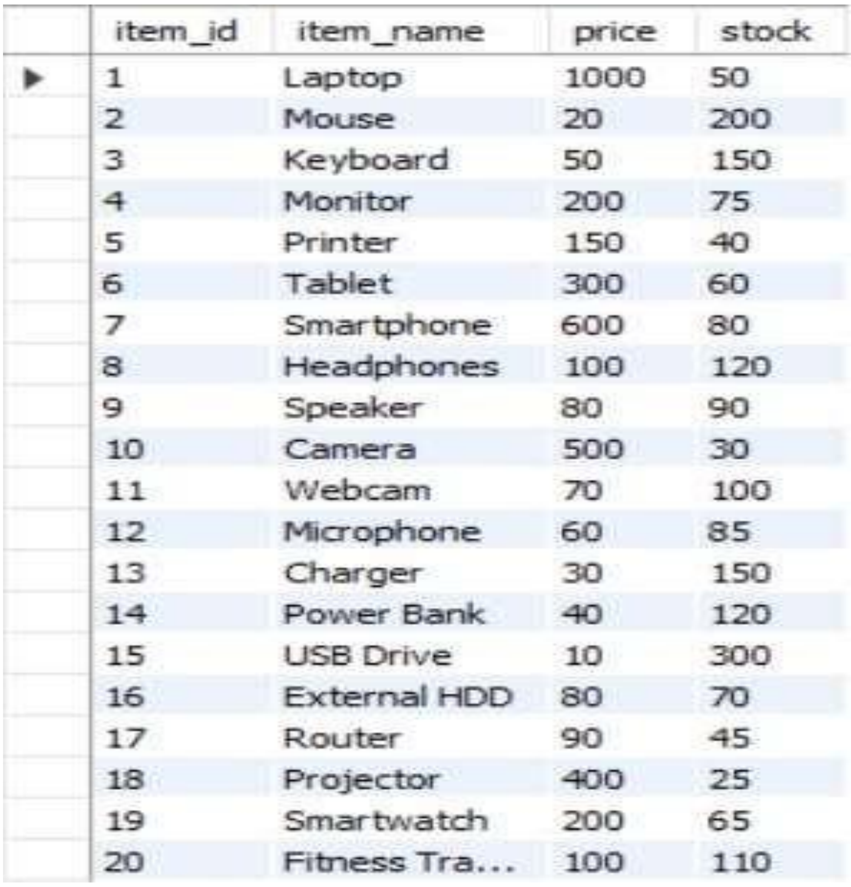
	item_id	item_name
▶	7	Smartphone
	19	Smartwatch
	9	Speaker
●	NULL	NULL

Create a view which contains the all staff details alongwith rating ;



staff_id	staff_name	dept	sal	rating
1	Alice	Sales	50000	5
2	Bob	Support	45000	4
3	Charlie	Development	60000	5
4	Dana	Marketing	55000	4
5	Eli	HR	48000	3
6	Faith	Finance	53000	5
7	Gabe	Support	47000	4
8	Hank	Sales	52000	5
9	Ivy	Development	61000	4
10	Jack	Marketing	54000	3
11	Kara	HR	49000	5
12	Liam	Finance	52000	4
13	Mia	Support	47000	5
14	Nina	Sales	53000	3
15	Owen	Development	60000	4
16	Paul	Marketing	56000	5
17	Quinn	HR	50000	4
18	Ruth	Finance	54000	5
19	Steve	Support	46000	3
20	Tina	Sales	52000	4

Create a view of the items which are available in the stockalong with price and quantity;



item_id	item_name	price	stock
1	Laptop	1000	50
2	Mouse	20	200
3	Keyboard	50	150
4	Monitor	200	75
5	Printer	150	40
6	Tablet	300	60
7	Smartphone	600	80
8	Headphones	100	120
9	Speaker	80	90
10	Camera	500	30
11	Webcam	70	100
12	Microphone	60	85
13	Charger	30	150
14	Power Bank	40	120
15	USB Drive	10	300
16	External HDD	80	70
17	Router	90	45
18	Projector	400	25
19	Smartwatch	200	65
20	Fitness Tra...	100	110

Conclusion

The implementation of this DBMS project for an ecommerce platform demonstrates the critical role of structured data management in modern online retail. By effectively managing user information, order details, item inventories, memberships, and ratings, the system ensures operational efficiency and enhances customer satisfaction. The relationships established between various entities such as users, orders, items, memberships, and staff provide a holistic view of the platform's ecosystem, enabling better decisionmaking and personalized user interactions. This project underscores the importance of a welldesigned database in supporting the dynamic needs of an e-commerce business, paving the way for future enhancements and innovation.