

SCHEMA CREATION:

USERS TABLE

```
CREATE TABLE USERS (  
    UserID            NUMBER PRIMARY KEY,  
    First_Name        VARCHAR2(50) NOT NULL,  
    Middle_Name        VARCHAR2(50),  
    Last_Name          VARCHAR2(50) NOT NULL,  
    Gender              VARCHAR2(10),  
    DateOfBirth        DATE,  
    SignupDate          DATE NOT NULL,  
    Is_Customer         NUMBER(1) DEFAULT 0 NOT NULL,  
    Is_Restaurantowner  NUMBER(1) DEFAULT 0 NOT NULL,  
    CONSTRAINT check_boolean_values CHECK (Is_Customer IN (0,1) AND Is_Restaurantowner IN (0,1))  
);
```

ADDRESS TABLE

```
CREATE TABLE ADDRESS (  
    UserID            NUMBER,  
    Street            Varchar2(100) NOT NULL,  
    Apartment          Varchar2(50) NOT NULL,  
    City              Varchar2(100) NOT NULL,  
    State             Varchar2(100) NOT NULL,  
    Country           Varchar2(100) NOT NULL,  
    Zipcode           Varchar2(50) NOT NULL,  
    PRIMARY KEY (UserID, Street, Apartment, City, State, Country, Zipcode),  
    FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE  
);
```

PHONE_NUMBER TABLE

```
CREATE TABLE PHONE_NUMBER (  
    UserID            NUMBER,  
    Phone_Number        VARCHAR2(20) NOT NULL,  
    PRIMARY KEY (UserID, Phone_Number),  
    FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE);
```

RESTAURANT TABLE

```
CREATE TABLE RESTAURANT (  
    RestaurantID      NUMBER PRIMARY KEY,  
    RestaurantName     VARCHAR2(50) NOT NULL,  
    OwnerID           NUMBER,  
    FOREIGN KEY (OwnerID) REFERENCES USERS(UserID) ON DELETE CASCADE,  
    CONSTRAINT unique_restaurant_name UNIQUE (RestaurantName)  
);
```

CUISINE TABLE

```
CREATE TABLE CUISINE(  
    CuisineID          NUMBER PRIMARY KEY,  
    CuisineName        VARCHAR2(50) NOT NULL  
);
```

FEATURES TABLE

```
CREATE TABLE FEATURES (  
    RestaurantID       NUMBER,  
    CuisineID          NUMBER,  
    PRIMARY KEY (RestaurantID, CuisineID),  
    FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE,  
    FOREIGN KEY (CuisineID) REFERENCES CUISINE(CuisineID) ON DELETE CASCADE  
);
```

PROMOTIONS TABLE

```
CREATE TABLE PROMOTIONS (  
    RestaurantID       NUMBER,  
    PromoID            NUMBER NOT NULL,  
    PromoDesc          VARCHAR2(200) NOT NULL,  
    PromoFrom          DATE NOT NULL,  
    PromoEnd           DATE NOT NULL,  
    PRIMARY KEY (RestaurantID, PromoID),  
    FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE,  
    CONSTRAINT promo_dur CHECK (PromoFrom < PromoEnd));
```

LOCATIONS TABLE

CREATE TABLE LOCATIONS (

LocationID NUMBER PRIMARY KEY,
City VARCHAR2(100) NOT NULL,
State VARCHAR2(100) NOT NULL,
Country VARCHAR2(100) NOT NULL,
Zipcode VARCHAR2(50) NOT NULL,
RestaurantID NUMBER,

FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE

);

OPERATIONAL_HOURS TABLE

CREATE TABLE OPERATIONAL_HOURS (

RestaurantID NUMBER,
LocationID NUMBER,
Dayoftheweek NUMBER CHECK (Dayoftheweek BETWEEN 1 AND 7) NOT NULL,
Openingtime DATE,
Closingtime DATE,

PRIMARY KEY (RestaurantID, LocationID, Dayoftheweek, Openingtime),

FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE,

FOREIGN KEY (LocationID) REFERENCES LOCATIONS(LocationID) ON DELETE CASCADE

);

ORDER TABLE

CREATE TABLE ORDERS (

OrderID NUMBER PRIMARY KEY,
DateofOrder DATE NOT NULL,
TotalAmount NUMBER NOT NULL,
DeliveryStatus VARCHAR2(20) NOT NULL
CHECK (DeliveryStatus IN ('Pending', 'Delivered', 'In Progress','Canceled')),

UserID NUMBER,

RestaurantID NUMBER,

FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE,

FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE);

MENU_ITEM TABLE

```
CREATE TABLE MENU_ITEM (  
    MenuItemID          NUMBER PRIMARY KEY,  
    Name                 VARCHAR(50) NOT NULL,  
    Description           VARCHAR(200) NOT NULL,  
    Price                NUMBER NOT NULL,  
    RestaurantID          NUMBER,  
    FOREIGN KEY (RestaurantID) REFERENCES RESTAURANT(RestaurantID) ON DELETE CASCADE  
);
```

ORDER_QUANTITY TABLE

```
CREATE TABLE ORDER_QUANTITY(  
    MenuItemID          NUMBER,  
    OrderID             NUMBER,  
    Quantity             NUMBER NOT NULL,  
    PRIMARY KEY (MenuItemID, OrderID),  
    FOREIGN KEY (MenuItemID) REFERENCES MENU_ITEM(MenuItemID) ON DELETE CASCADE,  
    FOREIGN KEY (OrderID) REFERENCES ORDERS(OrderID) ON DELETE CASCADE  
);
```

REVIEW TABLE

```
CREATE TABLE REVIEW (  
    ReviewID            NUMBER PRIMARY KEY,  
    ReviewText           VARCHAR(500) NOT NULL,  
    Rating               NUMBER NOT NULL,  
    DateofReview          DATE,  
    UserID               NUMBER,  
    MenuItemID           NUMBER,  
    FOREIGN KEY (MenuItemID) REFERENCES MENU_ITEM(MenuItemID) ON DELETE CASCADE,  
    FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE  
);
```

PAYMENTS TABLE

```
CREATE TABLE PAYMENTS (  
    PaymentID          NUMBER PRIMARY KEY,  
    PMethod            VARCHAR(50) NOT NULL,  
    Status             VARCHAR2(20) NOT NULL,  
    OrderID            NUMBER,  
    FOREIGN KEY (OrderID) REFERENCES ORDERS(OrderID) ON DELETE CASCADE  
    CONSTRAINT payment_status CHECK (Status IN ('PENDING', 'COMPLETED', 'FAILED', 'CANCELED'))  
);
```

CATEGORY TABLE

```
CREATE TABLE CATEGORIES(  
    CategoryID         NUMBER PRIMARY KEY,  
    CategoryName       VARCHAR2(50) NOT NULL  
);
```

MENU_ITEM_CATEGORIES TABLE

```
CREATE TABLE MENU_ITEM_CATEGORIES (  
    MenuItemID         NUMBER,  
    CategoryID         NUMBER,  
    PRIMARY KEY (MenuItemID, CategoryID),  
    FOREIGN KEY (MenuItemID) REFERENCES MENU_ITEM(MenuItemID) ON DELETE CASCADE,  
    FOREIGN KEY (CategoryID) REFERENCES CATEGORIES(CategoryID) ON DELETE CASCADE  
);
```

FAVORITE TABLE

```
CREATE TABLE FAVORITE (  
    MenuItemID         NUMBER,  
    UserID             NUMBER,  
    PRIMARY KEY (MenuItemID, UserID),  
    FOREIGN KEY (MenuItemID) REFERENCES MENU_ITEM(MenuItemID) ON DELETE CASCADE,  
    FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE  
)
```

DELIVERY TABLE

```
CREATE TABLE DELIVERY (  
    DeliveryID          NUMBER PRIMARY KEY,  
    PickupTime          TIMESTAMP DEFAULT NULL,  
    DropoffTime         TIMESTAMP DEFAULT NULL,  
    Is_Completed        NUMBER(1) DEFAULT 0 NOT NULL,  
    OrderID             NUMBER,  
    DelcoorID           VARCHAR(4),  
    DeldrivID           VARCHAR(4),  
    FOREIGN KEY (OrderID) REFERENCES ORDERS(OrderID) ON DELETE CASCADE,  
    FOREIGN KEY (DelcoorID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE,  
    FOREIGN KEY (DeldrivID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

EMPLOYEE TABLE

```
CREATE TABLE Employees (  
    EmployeeID          VARCHAR(4) PRIMARY KEY,  
    Emp_FName           VARCHAR2(50) NOT NULL,  
    Emp_MName           VARCHAR2(50) NOT NULL,  
    Emp_LName           VARCHAR2(50) NOT NULL,  
    Date_of_Birth       DATE NOT NULL,  
    Start_Date          DATE NOT NULL,  
    Department          VARCHAR2(50) NOT NULL,  
    EmpRole              VARCHAR2(50) NOT NULL,  
    CONSTRAINT EmployeeID_Format CHECK (REGEXP_LIKE(EmployeeID, '^E[0-9]{3}$')),  
    CONSTRAINT Role_Constraint CHECK (EmpRole IN ('PLATFORM MANAGER', 'DELIVERY  
                                                COORDINATOR', 'SUPPORT AGENT', 'DELIVERY DRIVER')),  
    CONSTRAINT Dept_Constraint CHECK (Department IN ('MANAGEMENT', 'DELIVERY  
                                                COORDINATION', 'SUPPORT', 'DELIVERY'))  
);
```

TRAINING TABLE

```
CREATE TABLE TRAINING (  
    TrainingID          NUMBER PRIMARY KEY,  
    TrainingDesc         VARCHAR(200) DEFAULT 'NONE' NOT NULL,  
    TrainingFromDate     DATE NOT NULL,  
    TrainingToDate       DATE NOT NULL,  
    EmployeeID          VARCHAR(4),  
    FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

CERTIFICATE TABLE

```
CREATE TABLE CERTIFICATE(  
    CertificateID        VARCHAR(30) PRIMARY KEY,  
    Issuing_Date         DATE NOT NULL,  
    CertificateName       VARCHAR(100),  
    EmployeeID          VARCHAR(4),  
    FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

INQUIRY TABLE

```
CREATE TABLE INQUIRY(  
    InquiryID           NUMBER PRIMARY KEY,  
    InquiryDesc         VARCHAR(255) NOT NULL,  
    InquiryDate         DATE NOT NULL,  
    InquiryStatus       VARCHAR(20),  
    UserID              NUMBER,  
    EmployeeID          VARCHAR(4),  
    FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE,  
    FOREIGN KEY (UserID) REFERENCES USERS(UserID) ON DELETE CASCADE,  
    CONSTRAINT inquiry_status CHECK (Status IN ('PENDING', 'RESOLVED'))  
);
```

DELIVERY DRIVER TABLE

```
CREATE TABLE DELIVERY_DRIVER(  
    EmployeeID      VARCHAR(4),  
    DriverVehicle    VARCHAR(30),  
    DriverContact    VARCHAR(20),  
    PRIMARY KEY(EmployeeID),  
    FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

PLATFORM MANAGER TABLE

```
CREATE TABLE PLATFORM_MANAGER(  
    PlatManID    VARCHAR(4),  
    PRIMARY KEY(PlatManID),  
    FOREIGN KEY (PlatManID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

DELIVERY COORDINATOR TABLE

```
CREATE TABLE DELIVERY_COORDINATOR (  
    DelCoorID    VARCHAR(4),  
    PRIMARY KEY(DelCoorID),  
    FOREIGN KEY (DelCoorID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

TRAINER TABLE

```
CREATE TABLE TRAINER (  
    TrainerID    VARCHAR(4),  
    PRIMARY KEY(TrainerID),  
    FOREIGN KEY (TrainerID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```


SUPPORT_AGENT

```
CREATE TABLE SUPPORT_AGENT (  
    SupportAgentID    VARCHAR(4),  
    TrainerID        VARCHAR(4),  
    PRIMARY KEY(EmployeeID),  
    FOREIGN KEY (SupportAgentID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
    FOREIGN KEY (TrainerID) REFERENCES EMPLOYEES(EmployeeID) ON DELETE CASCADE  
);
```

SQL QUERIES:

1]. List details of restaurant owners who have signed up within the past three months.

```
SELECT    UserID, First_Name, Last_Name, SignupDate
FROM      USERS
WHERE     Is_Restaurantowner = 1
AND       SignupDate >= ADD_MONTHS(SYSDATE, -3);
```

2]. Find the names of customers who placed orders with only two restaurants in the past month.

```
SELECT    U.First_Name, U.Last_Name, U.UserID
FROM      USERS U JOIN ORDERS O ON U.UserID=O.UserID
WHERE     O.DateofOrder>=SYSDATE-30
GROUP BY  U.First_Name, U.Last_Name, U.UserID
HAVING    COUNT(DISTINCT O.RestaurantID)=2;
```

3]. Calculate the average number of orders placed by the top five customers in the platform.

```
SELECT    AVG(OrderCount) AS AverageOrders
FROM      (
            SELECT    UserID, COUNT(*) AS OrderCount
            FROM      Orders
            GROUP BY  UserID
            ORDER BY  OrderCount DESC
            ) TopCustomers
WHERE     ROWNUM <= 5;
```

4]. List the name of each restaurant and its most popular menu item.

WITH RESTNAMES AS (

```
    SELECT      M.RestaurantID, M.MenuItemID,
                SUM(Q.Quantity) AS TotalQuantity
    FROM        MENU_ITEM M JOIN ORDER_QUANTITY Q
                ON M.MenuItemID = Q.MenuItemID
    GROUP BY    M.RestaurantID, M.MenuItemID
```

),

RANKED_ITEMS AS (

```
    SELECT      RestaurantID, MenuItemID, TotalQuantity,
                RANK() OVER
                (PARTITION BY RestaurantID ORDER BY TotalQuantity DESC)
                AS rank
    FROM        RESTNAMES
```

)

```
SELECT      R.RestaurantName, M.Name AS MostPopularItem
FROM        (RESTAURANT R JOIN RANKED_ITEMS RI
            ON R.RestaurantID = RI.RestaurantID) JOIN
            MENU_ITEM M ON RI.MenuItemID = M.MenuItemID
WHERE       RI.rank = 1;
```

5] Identify menu items that haven't been ordered in the last six months.

```
WITH MI AS (  
    SELECT      Q.MenuItemID  
    FROM        ORDER_QUANTITY Q  
    JOIN        ORDERS O ON Q.OrderID = O.OrderID  
    WHERE       O.DateOfOrder > ADD_MONTHS(SYSDATE, -6)  
)  
MU AS (  
    SELECT      M.ITEMID  
    FROM        MENU_ITEM M  
)  
SELECT      ITEMID  
FROM        MU  
MINUS  
SELECT      MENU_ITEM_ID  
FROM        MI;
```

6] Find customers who have reviewed all the items from a specific restaurant.

```
WITH REST_MENU_ITEMS AS(
    SELECT      COUNT(M.MenuItemID) as COUNTITEMS
    FROM        Menu_Item M
    WHERE       M.RestaurantID=1
),
USER_REVW_ITEMS AS(
    SELECT      U.First_Name, U.Last_Name, R.UserID,
                COUNT(DISTINCT R.MenuItemID) as REVIEWCOUNT
    FROM        ((REVIEW R JOIN USERS U ON R.UserID=U.UserID)
                JOIN MENU_ITEM I ON R.MenuItemID=I.MenuItemID)
                JOIN RESTAURANT T ON I.RestaurantID=T.RestaurantID
    WHERE       T.RestaurantID=1
    GROUP BY    R.UserID, U.First_Name, U.Last_Name
)
SELECT      URT.First_Name,URT.Last_Name
FROM        USER_REVW_ITEMS URT, REST_MENU_ITEMS RMI
WHERE       RMI.COUNTITEMS - URT.REVIEWCOUNT = 0;
```

7]. Identify the restaurant with the most promotions' amount in the past year

```
SELECT      R.RestaurantID as SrNo, R.RestaurantName as TOP_RESTAURANTS,
                COUNT(PROMOID) AS TOTALNOOFPROMOTIONS
FROM        RESTAURANT R JOIN PROMOTIONS P ON
                R.RestaurantID=P.RestaurantID
WHERE       PromoFrom>=ADD_MONTHS(SYSDATE,-12)
GROUP BY    R.RestaurantID, R.RestaurantName
ORDER BY    COUNT(PROMOID) DESC
FETCH      FIRST 3 ROWS ONLY;
```

8]. Find the year with the highest total order payment.

```
SELECT      EXTRACT(YEAR FROM DateofOrder) AS OrderYear,
            SUM(TotalAmount) AS TotalOrderAmount
FROM        Orders
WHERE       DeliveryStatus='Delivered'
GROUP BY    EXTRACT(YEAR FROM DateofOrder)
ORDER BY    TotalOrderAmount DESC
FETCH       FIRST 1 ROWS ONLY;
```

9]. List the names of customers who ordered the most popular menu items.

```
WITH RESTNAMES AS (  
    SELECT      M.RestaurantID, M.MenuItemID, SUM(Q.Quantity) AS TotalQuantity  
    FROM        MENU_ITEM M JOIN ORDER_QUANTITY Q  
                ON M.MenuItemID = Q.MenuItemID  
    GROUP BY    M.RestaurantID, M.MenuItemID  
),  
RANKED_ITEMS AS (  
    SELECT      RestaurantID, MenuItemID, TotalQuantity,  
                RANK() OVER  
                (PARTITION BY RestaurantID ORDER BY TotalQuantity DESC)  
                AS rank  
    FROM        RESTNAMES  
)  
SELECT      First_Name, Last_Name, RI.RestaurantID  
FROM        ((ORDER_QUANTITY Q JOIN RANKED_ITEMS RI  
              ON Q.MenuItemID=RI.MenuItemID)  
            JOIN ORDERS O ON Q.OrderID=O.OrderID)  
            JOIN USERS U ON O.UserID=U.UserID  
WHERE      RANK=1;
```

10]. Find delivery drivers who have delivered at least 10 orders in the past month.

```
SELECT      D.DelrivID AS DriverID, E.Emp_FName AS FirstName,
            E.Emp_LName AS LastName, COUNT(D.OrderID) AS TotalDeliveries
FROM        DELIVERY D JOIN ORDERS O ON D.OrderID = O.OrderID
            JOIN EMPLOYEES E ON D.DelrivID = E.EmployeeID
WHERE       D.Is_Completed = 1 AND
            O.DateofOrder >= ADD_MONTHS(SYSDATE, -1)
GROUP BY    D.DelrivID, E.Emp_FName, E.Emp_LName
HAVING      COUNT(D.OrderID) >= 10
ORDER BY    TotalDeliveries DESC;
```

11]. List customers who have been active for more than two years.

```
SELECT      UserID, First_Name, Middle_Name, Last_Name, SignupDate
FROM        USERS
WHERE       Is_Customer = 1 AND (Signupdate >= ADD_MONTHS(SYSDATE, -24)
            OR UserID in (
                SELECT      O.UserID
                FROM        ORDERS O
                WHERE       DateofOrder >= ADD_MONTHS(SYSDATE, -24)));
```


12]. Find the number of orders delivered by the top three delivery drivers.

```
SELECT      E.EmployeeID AS DriverID, E.Emp_FName AS DriverFirstName,
            E.Emp_LName AS DriverLastName,
            COUNT(D.OrderID) AS DeliveredOrders
FROM        (Delivery D JOIN ORDERS O ON D.OrderID=O.OrderID)
            JOIN Employees E ON D.DelrivID = E.EmployeeID
WHERE       O.DeliveryStatus = 'Delivered' AND D.Is_Completed = 1
GROUP BY    D.DelrivID, E.EmployeeID, E.Emp_FName, E.Emp_LName
ORDER BY    DeliveredOrders DESC
FETCH       FIRST 3 ROWS ONLY;
```

13] List the restaurant owner who manages the most restaurants.

```
SELECT      U.UserID AS OwnerID, U.First_Name AS OwnerFirstName,
            U.Last_Name AS OwnerLastName,
            COUNT(R.RestaurantID) AS NumberOfRestaurants
FROM        USERS U JOIN RESTAURANT R ON U.UserID = R.OwnerID
GROUP BY    U.UserID, U.First_Name, U.Last_Name
ORDER BY    NumberOfRestaurants DESC
FETCH       FIRST 1 ROWS ONLY;
```

14] Identify restaurants that have run promotions in every quarter of the past year.

```
SELECT      R.RestaurantID, R.RestaurantName
FROM        RESTAURANT R JOIN PROMOTIONS P
            ON R.RestaurantID = P.RestaurantID
WHERE       EXTRACT(YEAR FROM P.PromoFrom) = 2023
GROUP BY    R.RestaurantID, R.RestaurantName
HAVING      COUNT(DISTINCT TO_NUMBER(TO_CHAR(P.PromoFrom, 'Q')))) = 4;
```

15] List all employees who are also restaurant owners, and display their employee details along with the details of the restaurant they own.

```
SELECT      E.Emp_Fname, E.Emp_Lname, E.Start_Date, E.Department, E.EmpRole,
            R.RestaurantName
FROM        (EMPLOYEES E JOIN USERS U ON (E.Emp_Fname=U.First_Name
            AND E.Emp_Lname=U.Last_Name AND E.Date_of_Birth=U.DateofBirth))
            JOIN RESTAURANT R ON U.UserID=R.OwnerID
WHERE       Is_RestaurantOwner=1;
```

16]. List the names and contact information of all employees who were hired before a specific date but have not received any new training since that date.

```
SELECT      E.EmployeeID,E.Emp_FName,E.Emp_MName, E.Emp_LName, E.EmpRole,
            E.Department, E.Start_Date
FROM        Employees E LEFT JOIN Training T ON E.EmployeeID = T.EmployeeID
WHERE       E.Start_Date > DATE '2022-01-01'AND
            (T.TrainingToDate IS NULL OR t.TrainingToDate < DATE '2022-01-01');
```

VIEW STATEMENTS:

I) *TopCustomers*: View of customers who placed the most orders in the past month.

```
CREATE VIEW TOP_CUSTOMERS
AS
SELECT      U.UserID, U.First_Name, U.Last_Name,
            COUNT(O.OrderID) AS TOTALORDERS_PASTMONTH
FROM        ORDERS O JOIN USERS U ON O.UserID = U.UserID
WHERE       O.DateofOrder >= ADD_MONTHS(SYSDATE,-1)
GROUP BY    U.UserID, U.First_Name, U.Last_Name
ORDER BY    TOTALORDERS_PASTMONTH DESC;
```

II) *PopularRestaurants*: View of the most ordered-from restaurants in the past year.

```
CREATE VIEW POPULAR_RESTAURANTS
AS
SELECT      R.RestaurantID, R.RestaurantName, COUNT(O.OrderID) AS TotalOrders
FROM        ORDERS O JOIN RESTAURANT R ON O.RestaurantID = R.RestaurantID
WHERE       O.DateofOrder >= ADD_MONTHS(SYSDATE,-12)
GROUP BY    R.RestaurantID, R.RestaurantName
ORDER BY    TotalOrders DESC;
```

III] *HighlyRatedItems*: View of menu items that have an average rating of at least 4.5.

```
CREATE VIEW      HIGHLY_RATED_ITEMS
AS
SELECT          N.MenuItemID, N.Name, R.RestaurantID, R.RestaurantName
FROM            MENU_ITEM N JOIN RESTAURANT R
               ON N.RestaurantID=R.RestaurantID
WHERE           N.MenuItemID IN (
               SELECT      R.MenuItemID
               FROM        REVIEW R JOIN MENU_ITEM M
               ON R.MenuItemID=M.MenuItem
               GROUP BY    R.MenuItemID
               HAVING      AVG(R.Rating)>=4.5);
```

IV] *FrequentDrivers*: View of delivery drivers who have delivered the most orders in the past month.

```
CREATE VIEW FrequentDrivers
AS
SELECT      E.EmployeeID AS DriverID, E.Emp_FName AS DriverFirstName,
            E.Emp_LName AS DriverLastName, COUNT(D.OrderID) AS DeliveredOrders
FROM        (Delivery D JOIN ORDERS O ON D.OrderID=O.OrderID)
            JOIN Employees E ON D.DelrivID = E.EmployeeID
WHERE       O.DeliveryStatus = 'Delivered' AND D.Is_Completed = 1
            AND TRUNC(D.PickupTime)>=ADD_MONTHS(SYSDATE,-1)
            AND TRUNC(D.DropoffTime)<=SYSDATE
GROUP BY    D.DelrivID, E.EmployeeID, E.Emp_FName, E.Emp_LName
ORDER BY    DeliveredOrders DESC
FETCH       FIRST 3 ROWS ONLY;
```

V] *PotentialOwners*: View of customers who have added at least 10 menu items to their Favorites list but have not yet registered as Restaurant Owners.

```
CREATE VIEW POTENTIAL_OWNERS
AS
SELECT      U.UserID, U.First_Name, U.Last_Name,
            COUNT(F.MenuItemID)as NoofFavorites
FROM        FAVORITE F JOIN USERS U ON F.UserID=U.UserID
WHERE       Is_Restaurantowner = 0
GROUP BY    U.UserID, U.First_Name, U.Last_Name
HAVING      COUNT(F.MenuItemID)>=10;
```