Inner Circle

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Sql Updated Create Tables:

```
CREATE TABLE User (
        UserId                  INTEGER,
        LastName        VARCHAR(10),
        FirstName       VARCHAR(10),
        Address         VARCHAR (50),
        City            VARCHAR(20),
        State           CHAR(2),
        ZipCode         INTEGER,
        Telephone       CHAR(10),
        Email           VARCHAR(20),
        AcctNum         INTEGER,
        Created         DATE,
        CreditCard      INTEGER,
        Preferences     VARCHAR(50),
        Rating                  INTEGER,
        PRIMARY KEY (UserId)
);


CREATE TABLE Groups (
        GroupId         INTEGER,
        Name            VARCHAR(20),
        Type            CHAR(3),
        Owner                   INTEGER,
        MemberCount             INTEGER,
        Members         VARCHAR(10),
```

```sql
        PRIMARY KEY (GroupId),
        FOREIGN KEY (Owner) REFERENCES User(UserId)
);


CREATE TABLE Page (
        PageId          INTEGER,
        Name            VARCHAR(20),
        Owner                   INTEGER,
        PostCount       INTEGER,
        PRIMARY KEY (PageId),
        FOREIGN KEY (Owner) REFERENCES User(UserID)
);


CREATE TABLE Post (
        PostId                  INTEGER,
        Date            DATE,
        Content         VARCHAR(255),
        CommentCount INTEGER,
        Poster          INTEGER,
        PageId                  INTEGER,
        GroupId         INTEGER,
        LikeCount       INTEGER,
        Likes           VARCHAR(10),
        PRIMARY KEY (PostId),
        FOREIGN KEY (Poster) REFERENCES User(UserId),
        FOREIGN KEY (PageId) REFERENCES Page(PageId),
        FOREIGN KEY (GroupId) REFERENCES Groups(GroupId)
);


CREATE TABLE Comment (
        CommentId   INTEGER,
        Date            DATE,
        Content         CHAR(255),
        Poster          INTEGER,
        Post            INTEGER,
        LikeCount       INTEGER,
```

```sql
        Likes           VARCHAR(10),
        PRIMARY KEY(CommentId),
        FOREIGN KEY(Poster) REFERENCES User(UserId),
        FOREIGN KEY(Post) REFERENCES Post(PostId)
);


CREATE TABLE Message (
        MessageId   INTEGER,
        Date            DATE,
        Content        CHAR(255),
        Sender         INTEGER,
        Receiver      INTEGER,
        PRIMARY KEY(MessageId),
        FOREIGN KEY(Sender) REFERENCES User(UserId),
        FOREIGN KEY(Receiver) REFERENCES User(UserId)
);



CREATE TABLE Employee (
SSN             INTEGER,
StartDate      DATE,
Hourly                  DECIMAL(10,4),
UserId          INTEGER,
PRIMARY KEY (SSN),
FOREIGN KEY (UserId) REFERENCES User(UserID)
);


CREATE TABLE Advertisement (
AdId            INTEGER,
EmployeeId  INTEGER,
Type           CHAR(20),
Date            DATE,
Company     VARCHAR(30),
ItemName     VARCHAR(30),
Content        CHAR(255),
```

```sql
Category       CHAR(50),
UnitPrice      DECIMAL (10,4),
NumUnits       INTEGER,
PRIMARY KEY (AdId),
FOREIGN KEY (EmployeeId) REFERENCES Employee(SSN)
);


CREATE TABLE Sale (
TransId        INTEGER,
UserId         INTEGER,
Timestamp   DATETIME,
AdId           INTEGER,
NumUnits     INTEGER,
AcctNum       INTEGER,
PRIMARY KEY (TransId),
FOREIGN KEY (AdId) REFERENCES Advertisement(AdId),
FOREIGN KEY(UserId) REFERENCES User(UserId)
);


CREATE TABLE Membership (
       GroupId INTEGER,
       UserId INTEGER,
       PRIMARY KEY(GroupId, UserId),
       FOREIGN KEY (GroupId) REFERENCES Groups(GroupId),
       FOREIGN KEY (UserId) REFERENCES User(UserId)
);
```

Sql Transactions:

```sql
-- -------------------------------
-- USER-LEVEL GENERAL TRANSACTIONS
-- -------------------------------

-- Insert Users
INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
```

```sql
VALUES (1, 'Cuadrado', 'Brandon', '857 Peconic Street', 'Ronkonkoma', 'NY', 11779,
'6316781956', 'brancuad@gmail.com', 123456789, '2016-11-4', 123456789, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (2, 'Cuadrado', 'Antonio', '857 Peconic Street', 'Ronkonkoma', 'NY', 11779,
'6316781234', 'brancuad1@gmail.com', 987654321, '2016-11-4', 987654321, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (3, 'Champagne', 'Collin', '5 Elm Lane', 'Stony Brook', 'NY', 11790,
'6311234567', 'brancuad2@gmail.com', 132425462, '2016-11-4', 132425462, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (4, 'Smith', 'John', '5 Elm Lane', 'Stony Brook', 'NY', 11790, '6311234231',
'brancuad3@gmail.com', 132428291, '2016-11-4', 132421912, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (5, 'Doe', 'Jane', '6 Elm Lane', 'Stony Brook', 'NY', 11790, '6311234192',
'brancuad4@gmail.com', 132429108, '2016-11-4', 132429108, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (6, 'Marsh', 'Dave', '6 Elm Lane', 'Stony Brook', 'NY', 11790, '6317653458',
'brancuad5@gmail.com', 132428131, '2016-11-4', 132428131, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (7, 'Melling', 'Stefanie', '1010 Pond Road', 'Ronkonkoma', 'NY', 11779,
'6319347183', 'brancuad6@gmail.com', 132283718, '2016-11-4', 132283718, '',  0);
```

```sql
INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (8, 'Smith', 'Steve', '1010 Pond Road', 'Ronkonkoma', 'NY', 11779,
'6317461829', 'brancuad6@gmail.com', 132289284, '2016-11-4', 132289284, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (9, 'Bunch', 'Rebecca', '81 4th Street', 'St. James', 'NY', 11791, '6319103847',
'brancuad7@gmail.com', 182947182, '2016-11-4', 182947182, '',  0);


INSERT INTO User (UserId, LastName, FirstName, Address, City, State, ZipCode,
Telephone, Email, AcctNum, Created, CreditCard, Preferences, Rating)
VALUES (10, 'Chan', 'Josh', '81 4th Street', 'St. James', 'NY', 11791, '6317281932',
'brancuad8@gmail.com', 192019281, '2016-11-4', 192019281, '',  0);


-- Insert Personal Pages
INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (1, 'Brandon Cuadrado', 1, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (2, 'Antonio Cuadrado', 2, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (3, 'Collin Champagne', 3, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (4, 'John Smith', 4, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (5, 'Jane Doe', 5, 0);
```

```sql
INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (6, 'Dave Marsh', 6, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (7, 'Stefanie Melling', 7, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (8, 'Steve Smith', 8, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (9, 'Rebecca Bunch', 9, 0);


INSERT INTO Page (PageId, Name, Owner, PostCount)
VALUES (10, 'Josh Chan', 10, 0);


-- Search user for Sign in
SELECT *
FROM User
WHERE User.UserId = 1;

-- Post messages in personal pages
INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId)
VALUES (1, '2016-11-04', 'Welcome to InnerCircle!', 0, 1, 1);

-- Update post count of page
UPDATE Page
SET PostCount = 1
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 1);


INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId)
VALUES (2, '2016-11-04', 'Hello, everyone!', 0, 3, 3);
```

```sql
UPDATE Page
SET PostCount = 1
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 2);


INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId)
VALUES (3, '2016-11-04', 'Hi, how are you?', 0, 2, 1);


UPDATE Page
SET PostCount = 2
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 3);


INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId)
VALUES (4, '2016-11-04', 'I love InnerCircle!', 0, 3, 4);


UPDATE Page
SET PostCount = 1
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 4);


INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId)
VALUES (5, '2016-11-04', 'This is great!', 0, 5, 6);


UPDATE Page
SET PostCount = 1
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 5);

-- Send & receive a message
INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (1, '2016-11-04', 'Bruh.', 1, 2);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (2, '2016-11-04', 'Hello!', 2, 1);
```

```sql
INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (3, '2016-11-04', 'How are you?', 1, 2);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (4, '2016-11-04', 'I am well.', 2, 1);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (5, '2016-11-04', 'Same here.', 1, 2);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (6, '2016-11-04', 'Are you going out tonight?', 2, 1);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (7, '2016-11-04', 'I have plans.', 2, 1);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (8, '2016-11-04', 'Ok, maybe another time.', 2, 1);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (9, '2016-11-04', 'Sure.', 2, 1);


INSERT INTO Message (MessageId, Date, Content, Sender, Receiver)
VALUES (10, '2016-11-04', 'See you later.', 2, 1);

-- Delete a message
DELETE FROM Message
WHERE MessageId = 1;

-- -------------------------------
-- USERS INTERACT WITH THEIR OWN GROUPS
```

```sql
-- -----------------------------

-- Create a group
INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (1, 'InnerCircle Founders', 'COM', 1);


INSERT INTO Membership (GroupId, UserId)
VALUES(1, 1);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (2, 'Chess Club', 'COM', 2);


INSERT INTO Membership (GroupId, UserId)
VALUES(2, 2);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (3, 'Hockey Club', 'COM', 4);


INSERT INTO Membership (GroupId, UserId)
VALUES(3, 4);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (4, 'Video Game Fans', 'COM', 5);


INSERT INTO Membership (GroupId, UserId)
VALUES(4, 5);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (5, 'Stony Brook Students', 'COM', 4);
```

```sql
INSERT INTO Membership (GroupId, UserId)
VALUES(5, 4);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (6, 'Computing Society', 'COM', 1);


INSERT INTO Membership (GroupId, UserId)
VALUES(6, 1);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (7, 'Friend Circle', 'PVT', 2);


INSERT INTO Membership (GroupId, UserId)
VALUES(7, 2);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (8, 'Birthday Planning', 'PVT', 5);


INSERT INTO Membership (GroupId, UserId)
VALUES(8, 5);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (9, 'Employee Group', 'PVT', 8);


INSERT INTO Membership (GroupId, UserId)
VALUES(9, 8);


INSERT INTO Groups (GroupId, Name, Type, Owner)
VALUES (10, 'Football Team', 'COM', 10);
```

```sql
INSERT INTO Membership (GroupId, UserId)
VALUES(10, 10);

-- Search for a user and add to group
(SELECT *
FROM User U
WHERE U.UserId = 2);
-- Create group membership
INSERT INTO Membership (GroupId, UserId)
VALUES (1, 2);

-- Make a post to group
INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, GroupId)
VALUES (11, '2016-11-06', 'My first post!', 0, 1, 1);


-- Comment on a post
INSERT INTO Comment (CommentId, Date, Content, Poster, Post)
VALUES (1, '2016-11-06', 'My first comment!', 1, 1);


UPDATE Post
SET CommentCount = 1
WHERE PostId = (SELECT Post FROM Comment WHERE CommentId = 1);

-- Like a post
UPDATE Post
SET Likes = '{2}', LikeCount = 1
WHERE PostId = 1;

-- Like a comment
UPDATE Comment
SET Likes = '{1}', LikeCount = 1
WHERE CommentId = 1;

-- Remove a user from a group
DELETE FROM Membership
WHERE GroupId = 1 && UserId = 2;
```

```sql
-- Remove a post
UPDATE Page
SET PostCount = 0
WHERE PageId = (SELECT PageId FROM Post WHERE PostId = 7);


DELETE FROM Post
WHERE PostId = 7;

-- Remove a comment
UPDATE Post
SET CommentCount = 0
WHERE PostId = (SELECT Post FROM Comment WHERE CommentId = 1);

DELETE FROM Comment
WHERE CommentId = 1;

-- Unlike a post
UPDATE Post
SET Likes = '{}', LikeCount = 0
WHERE PostId = 1;

-- Unlike a comment
UPDATE Comment
SET Likes = '{}', LikeCount = 0
WHERE CommentId = 1;

-- Modify a post
UPDATE Post
SET Content = 'I modified this!'
WHERE PostId = 1;

-- Modify a comment
UPDATE Comment
SET Content = 'I modified this too!'
WHERE CommentId = 1;

-- Delete a group
```

```sql
DELETE FROM Membership
WHERE GroupId = 6;

DELETE FROM Groups
WHERE GroupId = 6;

-- Rename a group
UPDATE Groups
SET Name = 'Renamed Group'
WHERE GroupId = 1;

-- Employee Inserts
-- Employee inserts

INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (123456789,
12/12/2012, 8.00, 1);


INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (146647383,
10/12/2014, 9.00, 2);


INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (129999999,
9/1/2013, 10.00, 3);


INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (900020944,
10/13/2016, 18.00, 4);


INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (123333489,
12/2/2011, 24.00, 5);


INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (598743559,
2/22/2012, 15.00, 6);
```

INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (100303944, 11/9/2012, 9.00, 7);

INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (889775743, 9/1/2002, 11.00, 8);

INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (789111212, 6/6/1946, 21.00, 9);

INSERT INTO Employee (SSN, StartDate, Hourly, UserId) VALUES (123333789, 9/22/2005, 16.00, 10);

-- Advertisement Inserts
INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName, Content, UnitPrice, NumUnits)
VALUES (1, 123456789, 'Toys', '2016-07-15', 'BuildABear','Stuffed Bear', 'Glow in the dark bear!', 30.00, 500);

INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName, Content, UnitPrice, NumUnits)
VALUES (2, 123456789, 'Toys', '2016-04-15', 'HotWheels','Truck Replica', 'Minature Hummer Truck!', 20.00, 1000);

INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName, Content, UnitPrice, NumUnits)
VALUES (3, 146647383, 'Cars', '2016-03-15', 'Nissan','350z', 'Great gas milage!', 3000.00, 50);

INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName, Content, UnitPrice, NumUnits)
VALUES (4, 146647383, 'Cars', '2016-12-15', 'Honda','Chrysler', '4 Door Vehicle!', 2000.00, 25);

```sql
INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (5, 146647383, 'Cars', '2016-12-20', 'Toyota','Maxima',
'Manual Stick Shift Available!', 2250.00, 25);


INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (6, 146647383, 'VideoGames', '2016-12-20', 'EAGames','Assasins Creed',
'Play as a pirate and conquer the seas!', 25.00, 1000);


INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (7, 146647383, 'VideoGames', '2016-12-10', 'EAGames','Tetris',
'Put Blocks Together!', 20.00, 1500);


INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (8, 146647383, 'VideoGames', '2016-12-10', 'TellTale','Walking Dead',
'Fight Zombies!', 20.00, 1500);


INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (9, 146647383, 'VideoGames', '2016-09-10', 'TellTale','Call Of Duty',
'Great MultiPlayer Game!', 15.00, 20);


INSERT INTO Advertisement(AdId, EmployeeId, Type, Date, Company, ItemName,
Content, UnitPrice, NumUnits)
VALUES (10, 123456789, 'Toys', '2016-04-15', 'Barbie','Ken Doll',
'Authentic Ken Doll!', 5.00, 50000);

-- Record a transaction
INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1, 1, '2015-01-01 05:10:40', 1, 1, 1234);
```

```sql
-- Delete an Advertisement
DELETE FROM Advertisement WHERE AdId=2;

-- Update transaction for a customer as a Sales Agent
UPDATE Sale SET NumUnits=5 WHERE TransId=1;

-- Delete transaction for a customer as a Sales Agent
DELETE FROM Sale WHERE TransId=1;

-- Produce customer mailing list
SELECT UserId, LastName, FirstName, Email FROM User U WHERE
EXISTS(SELECT * FROM Sale S WHERE U.UserId = S.UserId);

-- Produce a list of item suggestions for a given customer
SELECT ItemName From (
SELECT Distinct Type From Advertisement A WHERE EXISTS(SELECT * FROM Sale
S WHERE S.UserId = 4 AND A.AdId = S.AdId)
) AS B, Advertisement A WHERE A.Type = B.Type;

-- Purchase one or more copies of an advertised item
INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (2, 2, '2015-04-01 09:19:00', 3, 4, 1235);


-- A Customer's Current Groups

-- For each of a customer's account, the account history
SELECT * FROM SALE S WHERE S.UserId = 4;

-- Best Seller List of Items
SELECT  A.AdId, ItemName, U FROM Advertisement A, (
        SELECT AdId, COUNT(AdId) AS U FROM SALE S GROUP BY S.AdId
) As Q WHERE Q.AdId = A.AdId ORDER BY U DESC LIMIT 3;

-- Personalized item suggested list
SELECT ItemName From (
SELECT Distinct Type From Advertisement A WHERE EXISTS(SELECT * FROM Sale
S WHERE S.UserId = 3 AND A.AdId = S.AdId)
) AS B, Advertisement A WHERE A.Type = B.Type;
```

-- Sales Insert

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1000, 1, '2015-01-01 05:10:40', 1, 1, 1234);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1001, 2, '2015-04-01 09:19:00', 1, 4, 1235);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1002, 2, '2016-06-04 06:15:00', 3, 2, 1236);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1003, 3, '2016-08-12 07:17:00', 3, 1, 1237);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1004, 3, '2016-09-23 06:43:50', 4, 1, 1238);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1005, 4, '2016-07-23 09:43:50', 1, 1, 1239);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1006, 4, '2016-06-22 01:32:50', 5, 1, 1240);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1007, 4, '2016-05-21 02:11:50', 6, 1, 1241);

INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1008, 4, '2016-04-20 04:12:50', 7, 1, 1242);

```sql
INSERT INTO Sale(TransId, UserId, Timestamp, AdId, NumUnits, AcctNum)
VALUES (1009, 4, '2016-03-27 05:15:50', 3, 1, 1243);


-- ------------------------------
-- GROUP TRANSACTIONS
-- ------------------------------

-- Join a group
INSERT INTO Membership (GroupId, UserId)
VALUES(1, 9);

-- Unjoin a group
DELETE FROM Membership
WHERE GroupId = 1 AND UserId = 9;

-- Make a post on a group page
INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (12, '2016-11-04', 'Hello World', 0, 2, 5, 1, 0);
UPDATE Page SET PostCount = PostCount+1 WHERE PageId = 5;

-- Comment on a post on a group page
INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (12,'2016-11-04', 'Content' , 2, 12, 0);

-- Like a post on a group page
UPDATE Post SET LikeCount = LikeCount+1 WHERE PostId = 12;

-- Like a comment on a group page
UPDATE Comment SET LikeCount = LikeCount+1 WHERE CommentId = 12;

-- Unlike a post
UPDATE Post SET LikeCount = LikeCount-1 WHERE PostId = 12;

-- Unlike a comment
UPDATE Comment SET LikeCount = LikeCount-1 WHERE CommentId = 12;

-- Modify a post
UPDATE Post SET Content = 'new content' WHERE PostId = 12;
```

```sql
-- Modify a comment
UPDATE Comment SET Content = 'new content' WHERE CommentId = 12;

-- Remove one of their posts on a group page
DELETE FROM Comment WHERE Post = 12;
DELETE FROM Post WHERE PostId = 12;

-- Remove a comment
DELETE FROM Comment WHERE CommentId = 12;



-- -------------------------
-- Manager-Level Transactions
-- -------------------------

-- Edit employee
UPDATE Employee SET Hourly = 9.00 WHERE SSN = 598743559;

-- Delete employee
DELETE FROM Employee WHERE SSN = 598743559;

-- Obtain a sales report for a particular month
SELECT * FROM Sale WHERE Sale.Timestamp >= 12/01/2012 AND Sale.Timestamp <= 12/31/2012;

-- Produce a comprehensive listing of all items being advertised on the site
SELECT ItemName FROM Advertisement;

-- Produce a list of transactions by item name or by user name
SELECT ItemName FROM Sale, Advertisement WHERE Sale.AdId = Advertisement.AdId;
SELECT LastName, FirstName FROM Sale, User WHERE Sale.UserId = User.UserId;

-- Produce a summary listing of revenue generated by a particular item, item type, or customer
SELECT ItemName, Type, UserId FROM Advertisement, Sale WHERE Advertisement.AdId = Sale.AdId;

SELECT NumUnits FROM Sale, User WHERE Sale.UserId = User.UserId;
```

```sql
-- Determine which customer representative generated most total revenue
SELECT * FROM (SELECT EmployeeId FROM Advertisement A, Sale S WHERE
A.AdId = S.AdId) B LIMIT 1;


-- Determine which customer generated most total revenue
SELECT * FROM (SELECT Sale.NumUnits FROM Sale, User WHERE Sale.AcctNum =
User.AcctNum) B LIMIT 1;

-- Produce a list of most active items
SELECT* FROM Sale LIMIT 10;


-- Produce a list of all customers who have purchased a particular item
SELECT FirstName, LastName FROM User, Sale, Advertisement Where User.AcctNum
= Sale.AcctNum AND Advertisement.AdId = Sale.AdId;


-- Produce a list of all items for a given company
SELECT Company, ItemName FROM Advertisement WHERE Company = 'Apple';


-- Comment inserts


INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (13, 11/2/2006, 'Hello', 1, 2, 4);


INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (14, 1/25/2012, 'Yes', 2, 2, 10);


INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (15, 12/11/2011, 'Really?', 3, 3, 20);
```

INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (16, 7/6/2015, 'Chip', 1, 3, 9);

INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (17, 4/7/2010, 'Ok', 4, 1, 11);

INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (18, 9/15/2006, 'No', 4, 5, 43);

INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (20, 7/7/2007, 'Seven', 1, 5, 41);

INSERT INTO Comment (CommentId, Date, Content, Poster, Post, LikeCount)
VALUES (21, 12/9/2016, 'Nice', 2, 4, 30);

-- Post Inserts

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (13, 11/14/2015, 'Hello', 4, 3, 1, 2, 0);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (14, 10/4/2012, 'World', 3, 4, 2, 3, 2);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (15, 11/4/2016, 'Hi', 0, 5, 6, 4, 8);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (16, 12/4/2016, 'Wow', 0, 4, 2, 5, 0);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId,
LikeCount) VALUES (17, 9/4/2016, 'Tony', 0, 7, 7,2, 0);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId, LikeCount) VALUES (18, 1/24/2016, 'Idk', 0, 5, 6, 3, 2);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId, LikeCount) VALUES (19, 4/24/2016, 'Really?', 0, 2, 5, 4, 9);

INSERT INTO Post (PostId, Date, Content, CommentCount, Poster, PageId, GroupId, LikeCount) VALUES (20, 10/22/2016, 'Sure', 0, 8, 8, 5, 7);