

USE BUDT703_Project_0506_02

-- Create view to show the restaurants' details including the average stars and numbers of reviews written by the users.

GO

DROP VIEW [VanMunchers.rating];

GO

```
CREATE VIEW [VanMunchers.rating] AS
    SELECT re.rstId, r.rstName, avg(re.revStars) as 'rstStars',
        CONCAT(r.rstAddress, ', ', r.rstCity, ', ', r.rstState, ' ', r.rstPostalCode)
AS 'rstLoc',
    r.rstWeb, COUNT (re.revId) as 'rstNumReview'
    FROM [VanMunchers.Review] re, [VanMunchers.Restaurant] r
    WHERE re.rstId = r.rstId
    GROUP BY re.rstId, r.rstName, r.rstAddress, r.rstCity, r.rstState,
r.rstPostalCode, r.rstWeb
WITH CHECK OPTION;
```

-- Create view to show the users' details including the numbers of reviews that the users wrote.

GO

DROP VIEW IF EXISTS [VanMunchers.numCusRev];

GO

```
CREATE VIEW [VanMunchers.numCusRev] AS
SELECT u.usrId, u.usrName, CONCAT(u.usrCity, ', ', u.usrState) AS 'usrLoc',
u.usrStartDate, COUNT(re.revId) AS 'usrNumReview'
FROM [VanMunchers.User] u, [VanMunchers.Review] re
WHERE u.usrId = re.usrId
GROUP BY u.usrId, u.usrName, u.usrCity, u.usrState, u.usrStartDate
WITH CHECK OPTION;
```

-- Create view to show the details of restaurant's bookmark including the numbers of reviews that the users wrote.

Go

DROP VIEW IF EXISTS [VanMunchers.mostBkm];

Go

```
CREATE VIEW [VanMunchers.mostBkm] AS
SELECT r.rstId, r.rstName, CONCAT(r.rstAddress, ', ', r.rstCity, ', ', r.rstState,
' ', r.rstPostalCode) AS 'rstLoc', r.rstWeb, COUNT(b.rstId) AS 'Number of
Bookmarks'
FROM [VanMunchers.Restaurant] r, [VanMunchers.Bookmark] b
WHERE r.rstId = b.rstId
GROUP BY r.rstId, r.rstName, r.rstAddress, r.rstCity, r.rstState, r.rstPostalCode,
r.rstWeb
WITH CHECK OPTION;
```

-- Create view to show the restaurant amenities.

Go

```
DROP VIEW IF EXISTS [VanMunchers.RestAmenities];
```

```
Go
```

```
CREATE VIEW [VanMunchers.RestAmenities] AS
```

```
SELECT
```

```
rs.rstId,rs.rstName,a.ameDelivery,a.ameTakeOut,a.ameOutDoorSeat,a.ameWifi,a.ameParking,(a.ameDelivery+a.ameTakeOut+a.ameOutDoorSeat+a.ameWifi+a.ameParking) as  
'totalAmenities'
```

```
FROM [VanMunchers.Restaurant] rs,[VanMunchers.Amenities] a
```

```
WHERE rs.rstId=a.rstId;
```

```
Go
```

```
-- 1. What are the top 5 restaurants that has the most reviews?
```

```
SELECT Top(5) ra.rstName, ra.rstNumReview
```

```
FROM [VanMunchers.rating] ra
```

```
ORDER BY ra.rstNumReview DESC;
```

```
-- 2. What are the top 5 restaurants with the highest star ratings?
```

```
SELECT Top(5) ra.rstName, ra.[rstStars] AS 'Restaurant Stars'
```

```
FROM [VanMunchers.rating] ra
```

```
ORDER BY ra.rstStars DESC;
```

```
-- 3. What are the names of customers that have written the most number of reviews?
```

```
SELECT ncr.userName, ncr.userNumReview
```

```
FROM [VanMunchers.numCusRev] ncr, (
```

```
    SELECT MAX(ncr.userNumReview) AS MaxNum FROM [VanMunchers.numCusRev] ncr) m
```

```
WHERE ncr.userNumReview = m.MaxNum
```

```
ORDER BY ncr.userNumReview DESC;
```

```
-- 4. Which are the top 5 restaurant which received the most number of bookmarks?
```

```
SELECT TOP (5) mb.rstName, mb.[Number of Bookmarks]
```

```
FROM [VanMunchers.mostBkm] mb
```

```
ORDER BY mb.[Number of Bookmarks] DESC;
```

```
-- 5. Whether the rating of the restaurant is different from 2 web resources?
```

```
SELECT w.webSource,rs.rstName,AVG(r.revStars) as avgRatings
```

```
FROM [VanMunchers.Review] r,[VanMunchers.Website] w, [VanMunchers.Restaurant] rs
```

```
WHERE r.webId=w.webId and r.rstId=rs.rstId
```

```
GROUP BY w.webSource,rs.rstName
```

```
-- 6. Which restaurant provides more amenities than average?
```

```
SELECT a.rstName, a.totalAmenities
```

```
FROM [VanMunchers.RestAmenities] a
```

```
WHERE a.totalAmenities > (select AVG(totalAmenities) FROM
```

```
[VanMunchers.RestAmenities])
```

```
-- 7. What amenities did the top 3 restaurants have in common for them to be popular? (considering bookmarks as a measure of popularity)
```

```
SELECT TOP (3) r.rstName,
```

```
a.ameDelivery,a.ameOutDoorSeat,a.ameParking,a.ameTakeOut,a.ameWifi,mb.[Number of Bookmarks]
```

```
FROM [VanMunchers.Restaurant] r, [VanMunchers.Amenities] a, [VanMunchers.Bookmark]
b, [VanMunchers.mostBkm] mb
WHERE a.rstId=r.rstId AND mb.rstId=r.rstId
GROUP BY
r.rstName, a.ameDelivery, a.ameOutdoorSeat, a.ameParking, a.ameTakeOut, a.ameWifi, mb.
[Number of Bookmarks]
ORDER BY mb.[Number of Bookmarks] DESC
```

```
-- 8. Who are the users are more active in sharing their views?
SELECT u.userName, SUM(a.textchars) AS 'Review Characters'
FROM (
    SELECT *, (LEN([VanMunchers.Review].revText)) as textchars
    FROM [VanMunchers.Review]) a, [VanMunchers.User] u
WHERE a.userId = u.userId
GROUP BY a.userId, u.userName
ORDER BY SUM(a.textchars) DESC
```