USE BUDT702_Project_0501_02

-- Select Statements & Business Statements

-- Which teams did Maryland Men's Soccer play in 2022 and were the games at Home or Away?
```sql
SELECT o.teamName AS 'Opponent Team Name', g.gameDate AS 'Game Date', h.homeAway AS 'Location'
FROM [OpponentTeam] o
JOIN [IsAgainst] a ON o.opponentTeamID = a.opponentTeamID
JOIN [Game] g ON a.gameID = g.gameID
JOIN [HeldAt] h ON g.gameID = h.gameID
JOIN [Location] l ON h.locationID = l.locationID
WHERE a.opponentTeamID = o.opponentTeamID AND g.gameDate >
'12/31/2021' AND g.gameDate < '01/01/2023'
```

-- How many wins does Maryland Men's Soccer have against Virginia, when were the games, where were the games, what was the score, and how many fans attended?
```sql
SELECT COUNT(g.gameID) AS 'Wins Against Virginia', g.gameDate AS 'Game Date',
        CONCAT(l.locationCity, ', ', l.locationState) AS 'Location',
        CONCAT(s.terpsScore, '-', s.opponentScore) AS 'Score', f.numOfFans AS 'Fan Attendance'
FROM [OpponentTeam] o
JOIN [IsAgainst] a ON o.opponentTeamID = a.opponentTeamID
JOIN [Game] g ON a.gameID = g.gameID
JOIN [Score] s ON g.gameID = s.gameID
JOIN [HeldAt] h ON g.gameID = h.gameID
JOIN [Location] l ON h.locationID = l.locationID
JOIN [FanAttendance] f ON g.gameID = f.gameID
WHERE o.teamName = 'Virginia' AND s.terpsScore > s.opponentScore
GROUP BY g.gameDate, l.locationCity, l.locationState, s.terpsScore,
s.opponentScore, f.numOfFans
```

-- How many times has Maryland Men's Soccer played each team, in descending order, and how many times did Maryland win, tie, or lose?
```sql
SELECT o.teamName AS 'Opponent Team Name', COUNT(g.gameID) AS 'Number of Games Played',
        COUNT(CASE WHEN s.terpsScore > s.opponentScore THEN 1 ELSE 0 END) AS 'Number of Wins',
        COUNT(CASE WHEN s.terpsScore = s.opponentScore THEN 1 ELSE 0 END) AS 'Number of Ties',
        COUNT(CASE WHEN s.terpsScore < s.opponentScore THEN 1 ELSE 0 END) AS 'Number of Losses'
FROM [OpponentTeam] o, [IsAgainst] a, [Game] g, [Score] s
```

WHERE o.opponentTeamID = a.opponentTeamID AND a.gameID = g.gameID
AND g.gameID = s.gameID
GROUP BY o.teamName
ORDER BY COUNT(g.gameID) DESC

-- What team did Maryland Mens ~~Soccer lose the worst against and when was~~
~~the game?~~
~~SELECT o.teamName AS 'Opponent Team Name', g.gameDate AS 'Game~~
~~Date',~~
~~(s.opponentScore - s.terpsScore) AS 'Score Difference'~~
~~FROM [OpponentTeam] o, [Game] g, [IsAgainst] a, [Score] s~~
~~WHERE (s.opponentScore - s.terpsScore) =~~
~~(SELECT MAX(b.opponentScore - b.terpsScore)~~
~~FROM [Score] b~~
~~WHERE b.opponentScore > b.terpsScore)~~
~~AND g.gameID = s.gameID AND o.opponentTeamID = a.opponentTeamID~~
~~AND a.gameID = g.gameID~~

~~-- How many losses does Maryland Men's Soccer have against each team?~~
~~SELECT o.teamName AS 'Opponent Team Name', COUNT(g.gameID) AS~~
~~'Number of Losses'~~
~~FROM [OpponentTeam] o~~
~~JOIN [IsAgainst] a ON o.opponentTeamID = a.opponentTeamID~~
~~JOIN [Game] g ON a.gameID = g.gameID~~
~~JOIN [Score] s ON s.gameID = g.gameID~~
~~WHERE s.opponentScore > s.terpsScore~~
~~GROUP BY o.teamName~~
~~ORDER BY COUNT(g.gameID) DESC~~

~~-- Does Maryland Men's Soccer win more at Home or Away, and how many~~
~~games have they played at Home versus Away?~~
~~SELECT (~~
~~SELECT COUNT(*)~~
~~FROM [HeldAt] h~~
~~JOIN [Score] s ON h.gameID = s.gameID~~
~~JOIN [Game] g ON g.gameID = h.gameID~~
~~WHERE h.homeAway = 'Home' AND s.terpsScore > s.opponentScore)~~
~~AS 'Wins at Home',~~
~~(SELECT COUNT(*)~~
~~FROM [HeldAt] h~~
~~JOIN [Score] s ON h.gameID = s.gameID~~
~~JOIN [Game] g ON g.gameID = h.gameID~~
~~WHERE h.homeAway = 'Home' AND s.terpsScore <~~
~~s.opponentScore) AS 'Losses at Home',~~
~~(SELECT COUNT(*)~~
~~FROM [HeldAt] h~~

```
                        JOIN [Score] s ON h.gameID = s.gameID
                        JOIN [Game] g ON g.gameID = h.gameID
                        WHERE h.homeAway = 'Away' AND s.terpsScore >
s.opponentScore) AS 'Wins at Away',
                        (SELECT COUNT(*)
                        FROM [HeldAt] h
                        JOIN [Score] s ON h.gameID = s.gameID
                        JOIN [Game] g ON g.gameID = h.gameID
                        WHERE h.homeAway = 'Away' AND
s.terpsScore < s.opponentScore) AS 'Losses at Away'
```