

```
⊟/* Part 3) SPROC with Parameters- Show me a player performance summary of goals, minutes and penalties:
   • Create this as a SPROC with a parameter for player and for season. */
   □CREATE PROC Player_Performance_by_Season_Para @PlayerName varchar(30), @Season int
    AS
   BEGIN
   SELECT
        P.FirstName + ' ' + P.LastName 'player_name',
        SUM(PF.MinPlayed) 'total_mins_played',
        SUM(PF.GoalsScored) 'total_goals',
        SUM(PF.Penalties) 'total_penalties',
        YEAR(M.Date) 'season'
    FROM Performance PF
    JOIN
        Player P on PF.PlayerID=P.PlayerID
    JOIN
        Match M ON PF.MatchID=M.MatchID
        CONCAT(P.FirstName, ' ', P.LastName) = @PlayerName AND Year(M.Date) = @Season
    GROUP BY
        YEAR(M.Date), P.FirstName, P.LastName
    END
100 % - 4

    Messages

  Commands completed successfully.
  Completion time: 2024-04-06T21:07:18.8113110-04:00
     USE [Soccer League]
     GO
   □DECLARE @return_value int
   ⊨ EXEC
              @return_value = [dbo].[Player_Performance_by_Season_Para]
              @PlayerName = N'Aline Tyler',
              @Season = 2008
     SELECT 'Return Value' = @return_value
     GO
100 % ▼ ◀
player_name total_mins_played total_goals total_penalties season
     Aline Tyler
                34.58
                                        1
                                                     2008
```

```
• Create this as a SPROC with a parameter for team and for season. */
   □ CREATE PROC Player_Roster_by_Season_Para @TeamName varchar(30), @Season int
   AS
   BEGIN
                                                                       -- 2016 Season Roster for Titan Warriors Team
   SELECT
                                                                       USE [Soccer League]
        T.TeamName AS 'team_name',
                                                                       GO
        (P.FirstName + ' ' + P.LastName) AS 'player_name',
        YEAR(TR.Season) AS 'season'
                                                                      □DECLARE @return_value int
    FROM
        Team T
                                                                      EXEC
                                                                               @return_value = [dbo].[Player_Roster_by_Season_Para]
    JOIN
                                                                               @TeamName = N'Titan',
        TeamRoster TR ON T.TeamID= TR.TeamID
                                                                               @Season = 2016
                                                                       SELECT 'Return Value' = @return_value
        Player P ON TR.PlayerID= P.PlayerID
    WHERE
                                                                       GO
        (T.TeamName LIKE '%' + @TeamName + '%') AND
        YEAR(TR.Season) = @Season
                                                                   100 % -
    END
                                                                   ■ Results Messages
                                                                       team_name player_name
                                                                                               season
100 % -
                                                                       Titan Warriors Jason Parsons
                                                                                               2016

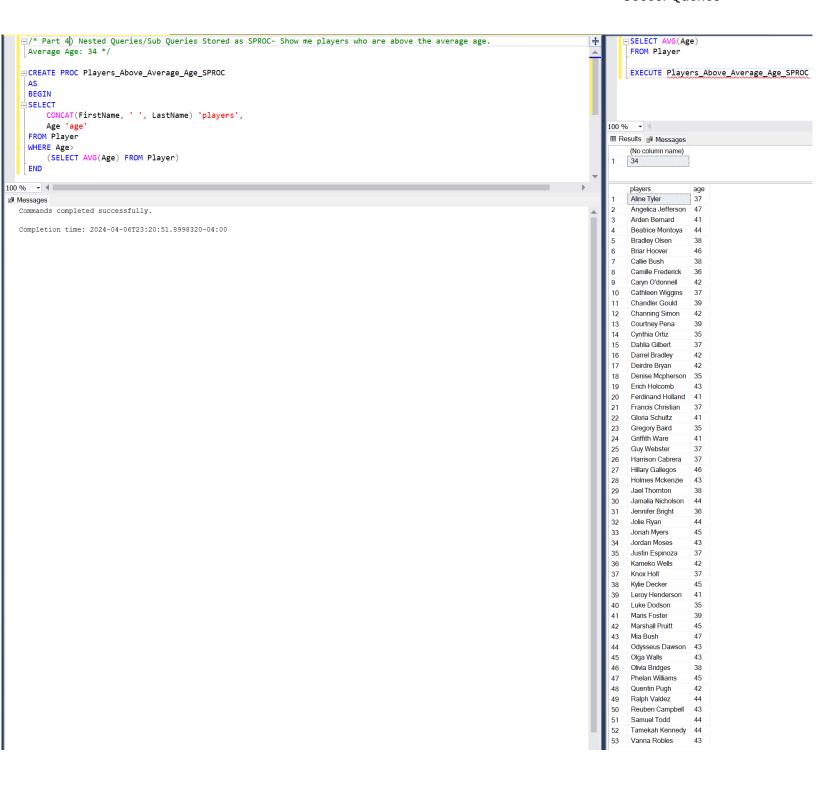
    Messages

                                                                   2
                                                                        Titan Warriors Maris Bruce
                                                                                               2016
                                                                        Titan Warriors Tamekah Kennedy
                                                                                              2016
  Commands completed successfully.
                                                                        Titan Warriors Caleb Pugh
                                                                                               2016
  Completion time: 2024-04-06T21:23:01.5767421-04:00
                                                                       Titan Warriors Gage Howell
                                                                                               2016
```

```
· Create this as a SPROC with a parameter for team, for position and for
    season. */
   □CREATE PROC Coach_Team_Roster_Position_by_Season_Para @TeamName varchar(30), @Position char(2), @Season int
   BEGIN
   ⊟SELECT
        C.FirstName + ' '+ C.LastName 'coach name',
        'position'=
        case
        when Role = 'AC' then 'Assistant Coach'
        when Role= 'HC' then 'Head Coach'
        when Role= 'VC' then 'Volunteer Coach'
        T.TeamName 'team_name',
        YEAR(TC.Season) 'season'
    FROM
        TeamCoach TC
    JOIN
        Team T ON TC.TeamID=T.TeamID
    JOIN
        Coach C ON TC.CoachID=C.CoachID
    WHERE
        (T.TeamName LIKE '%' + @TeamName + '%') AND
        TC.Role = @Position AND
        YEAR(TC.Season) = @Season
    END
100 % ▼ ◀ ■

    Messages

  Commands completed successfully.
  Completion time: 2024-04-06T21:56:04.1964492-04:00
    -- Show the Assistant Coach assigned to the Horizon Hawks Team in 2011 using the Parametric SPROC
   USE [Soccer League]
    GO
  □DECLARE @return_value int
           @return_value = [dbo].[Coach_Team_Roster_Position_by_Season_Para]
  ⊟ EXEC
           @TeamName = N'Horizon',
           @Position = N'AC',
           @Season = 2011
    SELECT 'Return Value' = @return_value
    GO
100 % 🕶 🖣 🔳
■ Results Messages
    coach_name
               position
                           team_name
   Marcia Davidson Assistant Coach Horizon Hawks 2011
```



```
⊟/* Part 4) Nested Queries/Sub Queries Stored as SPROC- Show me players and their total goals, where the players
    scored more than 1 goal above the average.*/
   □ CREATE PROC Players_Total_Scores_More_Than_Above_Average_SPROC
    AS
   BEGIN
    --First Query Considers the total sum of goals scored per player
   ≐SELECT
        P.PlayerID 'player_ID',
        PL.FirstName + ' ' + PL.LastName 'player_name',
        SUM(P.GoalsScored) 'total_goals_scored'
    FROM
        Performance P
    JOIN
        Player PL ON P.PlayerID=PL.PlayerID
    GROUP BY P.PlayerID, (PL.FirstName + ' ' + PL.LastName) --Groups by Player
    HAVING SUM(P.GoalsScored)> --Ensures we only show the players whose total goals exceed the average total goals per player +1
     (SELECT AVG(GoalsScoredTotal) + 1 AS AverageGoalsScoredPlusOne --Selects the avg of the total sum of each player's goals
    FROM (
        SELECT SUM(GoalsScored) AS GoalsScoredTotal
        FROM Performance
        GROUP BY PlayerID
    ) AS PlayerSumofGoals)
    END
100 % ▼ ◀ ■
Messages
  Commands completed successfully.
  Completion time: 2024-04-06T23:56:03.9359241-04:00
     --What is the avg of total goals per player?

☐SELECT AVG(GoalsScoredTotal) AS AverageGoalsScored

     FROM (
          SELECT SUM(GoalsScored) AS GoalsScoredTotal
          FROM Performance
          GROUP BY PlayerID
     ) AS PlayerSumofGoals
     -- It's 5, meaning the SPROC displays players whose total scores exceed 6
100 % ▼ 4
■ Results  Messages
     AverageGoalsScored
```

```
/* Part 4) Nested Queries/Sub Queries Stored as SPROC- Show the average age of all players on each team.*/
   ☐ CREATE PROC Players_Average_Age_Per_Team_SPROC
     AS
   BEGIN
   ≐SELECT
         TeamName AS team_name,
         AVG(Age) AS average_age
     FROM (
         SELECT
              T. TeamName,
              P.Age
         FROM Player P
         JOIN TeamRoster TR ON P.PlayerID = TR.PlayerID
          JOIN Team T ON TR.TeamID = T.TeamID
     ) AS TeamAges
                                                                  --Shows all ages for every player in the team roster table
     GROUP BY TeamName;
                                                                 SELECT
                                                                      T. TeamName,
     END
                                                                      P.LastName,
                                                                      P.Age
                                                                  FROM Player P
100 % ▼ ◀
Messages
                                                                      TeamRoster TR ON P.PlayerID = TR.PlayerID
   Commands completed successfully.
                                                                      Team T ON TR.TeamID = T.TeamID
   Completion time: 2024-04-07T00:19:45.6209620-04:00
                                                                  --Executes Procedure created to the left
                                                                  EXECUTE Players_Average_Age_Per_Team_SPROC
                                                             100 % -
                                                              TeamName LastName Age
                                                                 Horizon Hawks Christian
                                                                 Horizon Hawks Nicholson 44
                                                                 Horizon Hawks Goodman 32
                                                              3
                                                                 Horizon Hawks Decker
                                                                 Horizon Hawks Campbell 43
                                                              5
                                                                 Horizon Hawks Bruce
                                                              6
                                                                 Horizon Hawks Bell
                                                                                      24
                                                              8
                                                                  Horizon Hawks Delacruz 27
                                                                 Horizon Hawks Robles
                                                              9
                                                                Horizon Howke Moce
                                                                  team_name
                                                                              average_age
                                                                 Avalanche FC 35
                                                              2
                                                                  Galaxy Guardians 33
                                                              3
                                                                  Horizon Hawks
                                                                  Landmark Royals 34
                                                              5
                                                                  Liberty Tigers
                                                                               36
                                                              6
                                                                  Royal Lions
                                                                               33
                                                              7
                                                                  Thunder Strikers
                                                                               32
                                                              8
                                                                  Titan Warriors
                                                                               34
                                                                  United Defeatists
                                                                               34
                                                                  Victory Vipers
```

```
⊡/* Part 5) Using CTE Stored as SPROC- Show me winning teams from matches where the total goals scored
      in the match is greater than 4.*/
     □ CREATE PROC Winning_Teams_with_Total_Match_Goals_Above_4_SPROC
      AS
     BEGIN
        --Total Goals Scored per Match on both sides as a CTE
     WITH TotalGoalsperMatch_cte (MatchID, TotalGoals) AS
              SELECT MT.MatchID, SUM(MT.Goals) AS TotalGoals
              FROM MatchTeam MT
              GROUP BY MT.MatchID
              HAVING SUM(MT.Goals) > 4 --Having more than 4 total goals
        SELECT TGM.MatchID,
                   T. TeamName
        FROM TotalGoalsperMatch_cte TGM
        JOIN MatchTeam MT ON TGM.MatchID = MT.MatchID
        JOIN Team T ON MT.TeamID = T.TeamID
       WHERE MT.Result = 'W' --Ensures we only show the winning team
       END
                                                                                         EXECUTE Winning Teams with Total Match Goals Above 4 SPROC
-- There's 46 winning teams who participated in matches where the total goals scored was above 4
100 % ▼ ◀ ■

■ Messages

                                                                                     Commands completed successfully.
   Completion time: 2024-04-07T01:03:38.1430370-04:00
                                                                                                 Titan Warriors
                                                                                                  Avalanche FC
                                                                                                 Galaxy Guardian
Thunder Strikers
Titan Warriors
                                                                                     7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
                                                                                                 Royal Lions
Liberty Tigers
United Defeatists
United Defeatists
                                                                                                 Titan Warriors
                                                                                                  Thunder Strikers
                                                                                                 United Defeatists
Royal Lions
                                                                                                  Victory Vipers
                                                                                                 United Defeatists
                                                                                                  Titan Warriors
                                                                                                  Titan Warriors
                                                                                                 Titan Warriors
Avalanche FC
Liberty Tigers
Titan Warriors
                                                                                                  Thunder Strikers
                                                                                                 Thunder Strikers
Landmark Royals
                                                                                                  Thunder Strikers
                                                                                                 United Defeatists
                                                                                                 Galaxy Guardians
Avalanche FC
Thunder Strikers
                                                                                                 Horizon Hawks
                                                                                                 Royal Lions
Thunder Strikers
United Defeatists
                                                                                                 Landmark Royals
                                                                                                 Landmark Royals
                                                                                                 Victory Vipers
Victory Vipers
Liberty Tigers
                                                                                                 Liberty Tigers
                                                                                                  Galaxy Guardi

    Query executed successfully.

                                                                                                                                                                CHRISTIAN\SQLEXPRESS (15.0 ... | CHRISTIAN\chris (51) | Soccer League | 00:00:00 | 46 rows
```

```
⊟/* Part 5) Using CTE Stored as SPROC- Show me players from teams having a winning record in a season
    Found this one incredibly challenging as I had to redo it for a couple hours because it kept failing my logic checks but I finally got it :)*/
    □ CREATE PROC Players_Whose_Teams_Had_A_Winning_Streak_For_a_Season_SPROC
     AS
    BEGIN
     WITH WinningTeamsForSeason_cte (WinningTeamID, WinningTeamName, Season) --This CTE looks at which TEAMS had a winning streak for a SEASON
     AS
          SELECT MT.TeamID AS WinningTeamID, T.TeamName AS WinningTeamName, YEAR(M.Date) AS Season
          FROM MatchTeam MT
          JOIN Match M ON MT.MatchID = M.MatchID
          \ensuremath{\mathsf{JOIN}} Team T \ensuremath{\mathsf{ON}} MT.TeamID = T.TeamID
          WHERE MT.Result = 'W' --Displays Teams who have had a win during that season... but now we have to make sure they didn't have any losses that season
          AND T.TeamName NOT IN ( --Ensures the Team is NOT IN the result set of the teams that had a loss for that year
              SELECT T2.TeamName
              FROM MatchTeam MT2 --Have to create new aliases for nested query
              JOIN Match M2 ON MT2.MatchID = M2.MatchID
              JOIN Team T2 ON MT2. TeamID = T2. TeamID
              WHERE MT2.Result = 'L'
              AND YEAR(M2.Date) = YEAR(M.Date) -- Ensures it only searches in current season winning streak (not all time)
          GROUP BY MT.TeamID, T.TeamName, YEAR(M.Date)
     SELECT
         P.FirstName+' '+P.LastName 'PlayerName',
          WTS.WinningTeamName,
         WTS.Season
     FROM WinningTeamsForSeason_cte WTS
         TeamRoster TR ON WTS.WinningTeamID=TR.TeamID
     JOTN
         Player P ON TR.PlayerID=P.PlayerID
     WHERE WTS.Season=YEAR(TR.Season) /*Have to include this because otherwise result set includes players who belong in the future to that team,
     even if not during the current season in which they had their winning streak*/
     ORDER BY WTS. Season
                                                                                                      --Executing SPROC just created and final logic check
     END
                                                                                                    □ EXECUTE Players Whose Teams Had A Winning Streak For A Season SPROC
                                                                                                      --There was only one player in Victory Vipers in 2024?
100 % ▼ ◀ ■
                                                                                                      FROM Team -- it's team 4

    Messages

   Commands completed successfully.
                                                                                                    SELECT *
                                                                                                      FROM TeamRoster TR
WHERE YEAR(Season)=2024 AND TeamID=4
   Completion time: 2024-04-07T02:21:25.9589640-04:00
                                                                                                      --we only had one player in the team and they still came out on top :)
                                                                                                 100 % 🕶 🔻
                                                                                                  PlayerName
                                                                                                                   WinningTeamName
                                                                                                  123 Kennedy Sims
                                                                                                                    Thunder Strikers
                                                                                                                                 2023
                                                                                                  124 Amber Macdonald
                                                                                                                   Thunder Strikers
                                                                                                                                 2023
                                                                                                  125 Kylie Decker
                                                                                                                    Liberty Tigers
                                                                                                                                 2023
                                                                                                  126 Aline Tyler
                                                                                                                    Liberty Tigers
                                                                                                                                 2023
                                                                                                  127 Kennedy Sims
                                                                                                                   Liberty Tigers
                                                                                                                                 2023
                                                                                                  128 Phelan Williams
                                                                                                                   Victory Vipers
                                                                                                                                 2024
                                                                                                      TeamID TeamName
                                                                                                                         CaptainID
                                                                                                     1
                                                                                                            Horizon Hawks
                                                                                                                         26
                                                                                                             Titan Warriors
                                                                                                             Landmark Royals
                                                                                                             Victory Vipers
                                                                                                                         10
                                                                                                             Thunder Strikers 68
                                                                                                            Galaxy Guardians 82
                                                                                                  6
                                                                                                             Avalanche FC
                                                                                                                         65
                                                                                                             United Defeatists 22
                                                                                                             Royal Lions
                                                                                                  10
                                                                                                      10
                                                                                                            Liberty Tigers
                                                                                                                         48
                                                                                                      TeamID PlayerID Season
                                                                                                     4 12
```

```
--Making the view we just created (which we had saved as a CTE in previous query, and now a view) to a table
    CREATE VIEW Seasonal_Winning_Teams_VW
      AS
      SELECT MT.TeamID AS WinningTeamID, T.TeamName AS WinningTeamName, YEAR(M.Date) AS Season
      FROM MatchTeam MT
      JOIN Match M ON MT.MatchID = M.MatchID
      JOIN Team T ON MT.TeamID = T.TeamID
      WHERE MT.Result = 'W'
      AND T.TeamName NOT IN (
          SELECT T2.TeamName
          FROM MatchTeam MT2
          JOIN Match M2 ON MT2.MatchID = M2.MatchID
          JOIN Team T2 ON MT2.TeamID = T2.TeamID
          WHERE MT2.Result = 'L'
          AND YEAR(M2.Date) = YEAR(M.Date)
      GROUP BY MT.TeamID, T.TeamName, YEAR(M.Date)
□/* Part 6) Show me players and their coaches from winning teams, by season:
• First and last name of players and coaches, team names, and season */
```

□ CREATE PROC Players_Coaches_from_Winning_Teams_SPROC					
AS					
RBEGIN					
SELECT1ST QUERY TO JOIN Players to Winning Teams					
		EVECUT	Playons Coach	nes_from_Winnin	g Toom
'Player' AS Category,		EXECUTI	riayers_coaci	iez ilioni miniiin	S_IEall
<pre>CONCAT(P.FirstName, ' ',P.LastName) AS 'Name',</pre>					
WT.WinningTeamName,	100 9	% ▼ ◀			
WT. Season	■R	esults 🗐 N	lessages		
FROM Seasonal_Winning_Teams_VW WTJOINING THE VIEW TO OUR TABLES IN 1ST QU	E	Category	Name	WinningTeamName	Seasor
JOIN	1	Player	Jasper Owen	Thunder Strikers	2009
TeamRoster TR ON WT.WinningTeamID=TR.TeamID	2	Player	Illana Gallegos	Thunder Strikers	2009
JOIN	3	Player	Wynter Klein	Thunder Strikers	2009
Player P ON TR.PlayerID=P.PlayerID	4	Player	Jason Peck	Thunder Strikers	2009
	5	Player	Francis Christian	Landmark Royals	2009
WHERE WT.Season=YEAR(TR.Season)	6	Player	Riley Dalton	Landmark Royals	2009
UNION ALL	7	Player	Deirdre Bryan	Landmark Royals	2009
SELECT2nd QUERY TO JOIN Coaches to Winning Teams	8	Player	Arden Bernard	Avalanche FC	2009
'Coach' AS Category,	9	Player	Melodie Velazquez		2009
CONCAT(C.FirstName, '', C.LastName),	10	Player	Derek Rose	Avalanche FC	2009
WT.WinningTeamName,	11	Coach	Clark Cortez	Landmark Royals	2009
WT. Season	12	Player	Sheila Flynn	Landmark Royals	2010
^^^^	13	Player	Cathleen Wiggins	Landmark Royals	2010
FROM Seasonal Winning Teams VW WTJOINING THE VIEW TO OUR TABLES IN 2ND QU		Player	Derek Rose	Landmark Royals	2010
JOIN	15	Player	Moana Ramos	Landmark Royals	2010
TeamCoach TC ON WT.WinningTeamID=TC.TeamID	16	Player	Ralph Valdez	Thunder Strikers	2011
JOIN	17	Player	Melodie Velazquez	Thunder Strikers	2011
Coach C ON TC.CoachID=C.CoachID	18 19	Player	Aline Tyler Jason Peck	Thunder Strikers Thunder Strikers	2011
WHERE WT.Season=YEAR(TC.Season)	20	Player Player	Ursa Vazquez	Thunder Strikers Thunder Strikers	2011
ORDER BY WT. Season	21	Player	September Bray	Thunder Strikers	2011
END	22	Player	Knox Holt	Titan Warriors	2011
	23	Player	Ivana Wiggins	Titan Warriors	2011
	24	Player	Georgia Oneil	Titan Warriors	2011
•	25	Player	Hadassah Manning	Titan Warriors	2011
sages	26	Player	Beatrice Montoya	Titan Warriors	2011
mmands completed successfully.	27	Coach	Inga Garrett	United Defeatists	2011
•	28	Coach	Mannix Fitzpatrick	Titan Warriors	2011
ompletion time: 2024-04-07T03:04:54.9073727-04:00	29	Coach	Ebony Horne	Thunder Strikers	2011
	30	Player	Hamish Foster	United Defeatists	2011
	21	Diaman	Olivio Dridges	United Defections	2011