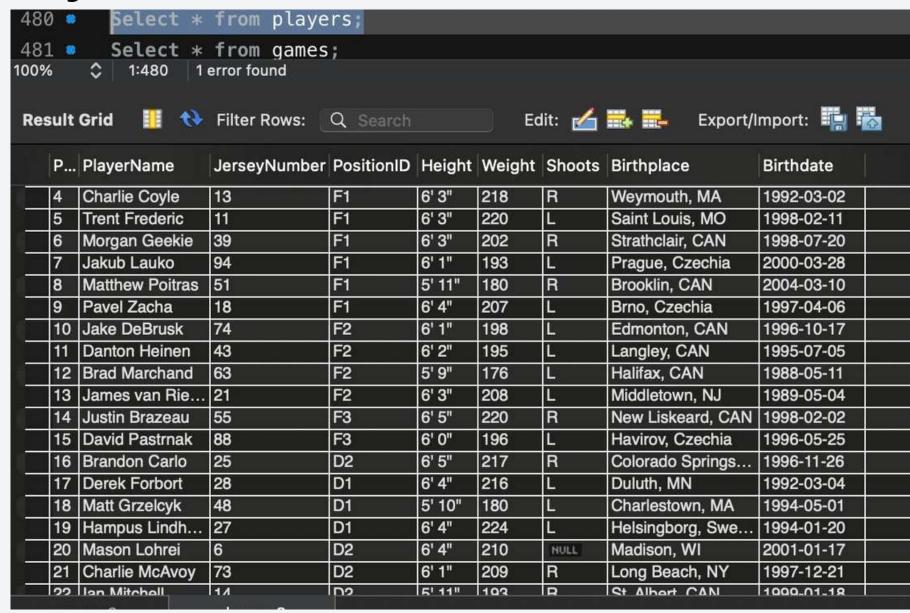
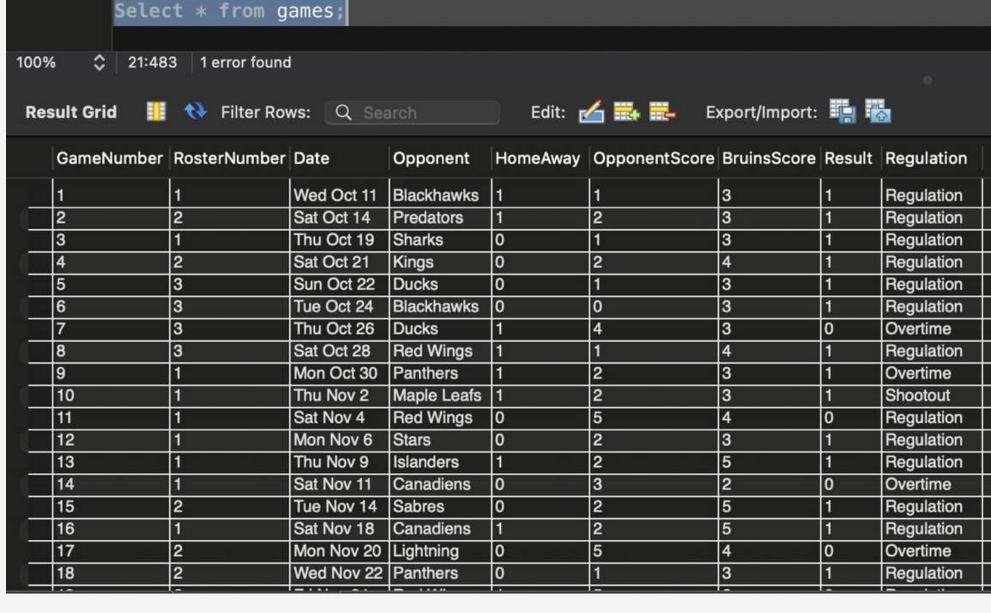
# **SQL Tables**

### **Players**

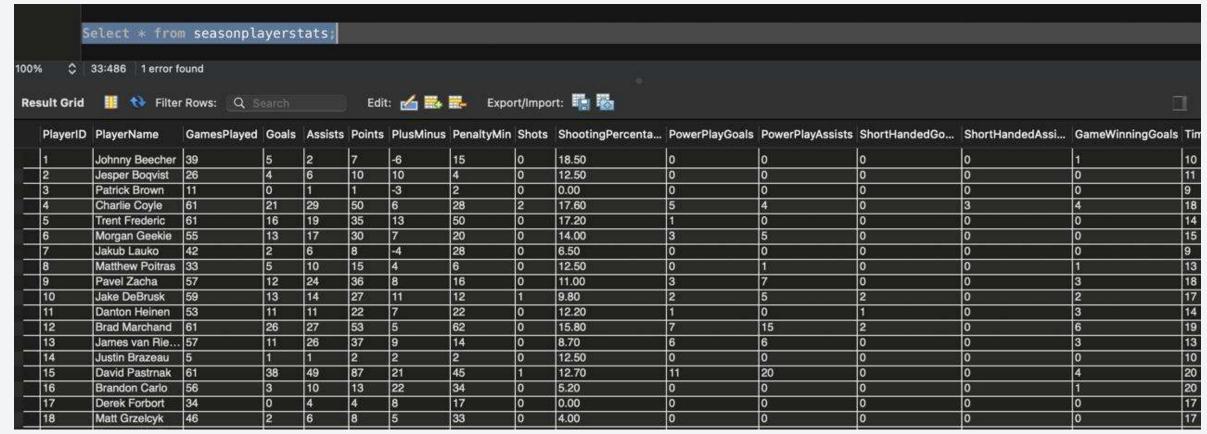


#### **Games**

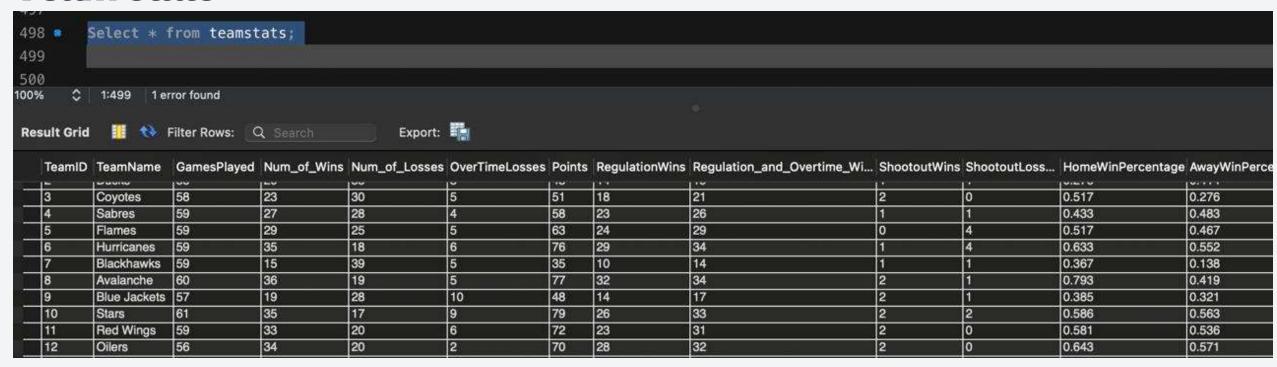


## **SQL Tables**

### **Player stats**

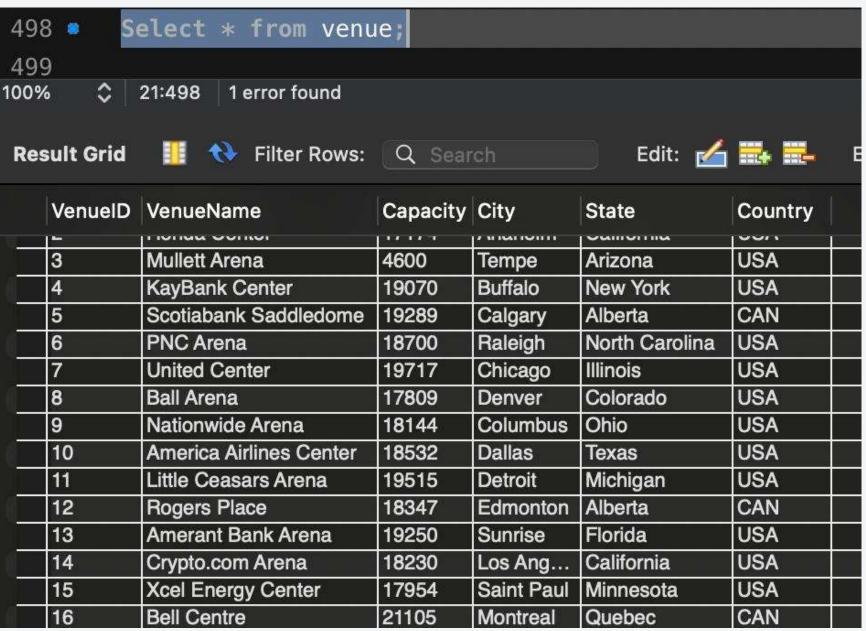


#### **Team stats**

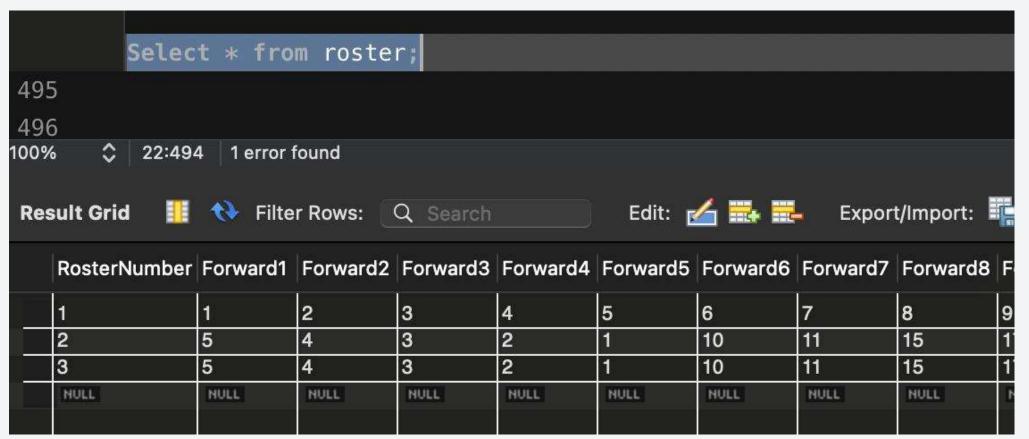


# **SQL Tables**

#### **Venues**



#### Roster





```
-- Adding a procedure to retrieve top players

DELIMITER $$

CREATE PROCEDURE GetTopPlayers(IN top_n INT)

BEGIN

SELECT PlayerID, PlayerName, Goals

FROM players

ORDER BY Goals DESC

LIMIT top_n

END $$

DELIMITER;
```

```
-- Adding a join query for player performance analysis

-- Query to find the performance of players based on their captaincy role

SELECT p.PlayerName, c.CaptainType, ps.Goals, ps.Assists

FROM players p

JOIN captain c ON p.PlayerID = c.PlayerID

JOIN seasonplayerstats ps ON p.PlayerID = ps.PlayerID

WHERE ps.Goals > 10;
```

PlayerName

Brad Marchand Alternate

David Pastrnak Alternate

CaptainType Goals Assists

26

38

27

49

457 Add	ding a trigger to audit player stats updates			
458				
459 DELIM	ITER \$\$			
460 • CREATI	CREATE TRIGGER PlayerStatsUpdate			
461 AFTER	AFTER UPDATE ON seasonplayerstats			
462 <b>FOR E</b>	ACH ROW			
463 <b>⊝ BEGIN</b>				
464 II	NSERT INTO player_stats_audit (PlayerID, OldGoals, NewGoals, UpdateTime)			
465 V	ALUES (OLD.PlayerID, OLD.Goals, NEW.Goals, NOW());			
466 END \$	\$			
467 DELIM	ITER ;			
160				



```
-- Query 2: Join captain and players table to list captain details with team affiliation
SELECT c.CaptainID, p.PlayerName, c.CaptainType
 FROM captain c
JOIN players p ON c.PlayerID = p.PlayerID;
-- Query 4: Trigger to automatically update team statistics after a game result is updated
DELIMITER //
CREATE TRIGGER UpdateTeamStats AFTER UPDATE ON games
FOR EACH ROW
BEGIN
    IF NEW.Result <> OLD.Result THEN
        UPDATE teams
        SET Wins = Wins + (NEW.Result = 'Win') - (OLD.Result = 'Win'),
            Losses = Losses + (NEW.Result = 'Loss') - (OLD.Result = 'Loss')
        WHERE TeamName = 'Boston Bruins';
    END IF;
~ END //
DELIMITER ;
-- Query 3: Stored Procedure to fetch details of games against a specific opponent
DELIMITER //
 CREATE PROCEDURE GetGamesByOpponent(IN OpponentName VARCHAR(50))
BEGIN
     SELECT * FROM games WHERE Opponent = OpponentName;
- END //
DELIMITER ;
```

	CaptainID	PlayerName	CaptainType	
	1	Brad Marchand	Alternate	
	2	Charlie McAvoy	Alternate	
30	3	David Pastrnak	Alternate	



```
-- Query 5: Aggregate query to count games played at home vs away
SELECT HomeAway, COUNT(*) AS GamesCount
FROM games
GROUP BY HomeAway;
```

```
-- Query 6: Insert a new coach entry
INSERT INTO coach (CoachName, Position, Seasons)
VALUES ('Mark Smith', 'Special Teams Coach', 5);
```

```
-- Query 7: Delete games where Bruins lost by more than 5 points

DELETE FROM games

WHERE OpponentScore - BruinsScore > 5 AND Result = 1;
```

Home	eAway Games	Count
1	30	
0	30	



```
-- Query 8: Stored Procedure to list all captains of a specific type
 DELIMITER //
 CREATE PROCEDURE GetCaptainsByType(IN CaptainTypeName VARCHAR(20))
 BEGIN
      SELECT * FROM captain WHERE CaptainType = CaptainTypeName;
 END //
 DELIMITER ;
  -- Query 9: Trigger to cascade delete players when a team is removed
 DELIMITER //
  CREATE TRIGGER CascadeDeletePlayers BEFORE DELETE ON teams
  FOR EACH ROW

→ BEGIN

     DELETE FROM players WHERE TeamID = OLD.TeamID;
 END //
  DELIMITER ;
-- Query 10: Conditional update to mark games with high scores
UPDATE games
SET Regulation = 'High Scoring'
WHERE BruinsScore > 5 AND OpponentScore > 5;
```



```
-- Query 12: Join games and coach table to see coaches in charge during each game
SELECT g.GameNumber, g.Date, c.CoachName, c.Position
FROM games g
JOIN coach c ON g.RosterNumber = c.CoachID
WHERE g.Result = 'Win';
```

```
-- Query 1: Update goals in the captain's table (example of an UPDATE statement)
UPDATE captain
SET CaptainType = 'Alternate'
WHERE PlayerName = 'Brad Marchand';
```

```
-- Query 11: Subquery to fetch the best captain based on performance (hypothetical)

SELECT PlayerID, PlayerName, PositionID

FROM Players

WHERE PlayerID=(

SELECT PlayerID

FROM captain

where PlayerID < 13
)
```

7 11 14 17	Thu Oct 26 Sat Nov 4 Sat Nov 11	Chris Kelly Jim Montgomery Jim Montgomery	Assistant Coach Head Coach
14 17	Sat Nov 11		Dispositive of the particular
17	Company of the Compan	Jim Montgomery	
		Unit Workgomery	Head Coach
	Mon Nov 20	Joe Sacco	Assistant Coach
19	Fri Nov 24	Joe Sacco	Assistant Coach
20	Sat Nov 25	Joe Sacco	Assistant Coach
21	Mon Nov 27	Joe Sacco	Assistant Coach
25	Thu Dec 7	Chris Kelly	Assistant Coach
27	Wed Dec 13	Chris Kelly	Assistant Coach
29	Sat Dec 16	Jim Montgomery	Head Coach
30	Tue Dec 19	Joe Sacco	Assistant Coach
31	Fri Dec 22	Chris Kelly	Assistant Coach
32	Sat Dec 23	Jim Montgomery	Head Coach
37	Thu Jan 4	Joe Sacco	Assistant Coach
39	Mon Jan 8	Joe Sacco	Assistant Coach
40	Tue Jan 9	Joe Sacco	Assistant Coach
41	Thu Jan 11	Joe Sacco	Assistant Coach
47	Wed Jan 24	Joe Sacco	Assistant Coach
50	Tue Feb 6	Chris Kelly	Assistant Coach
52	Sat Feb 10	Joe Sacco	Assistant Coach
53	Tue Feb 13	Joe Sacco	Assistant Coach
54	Thu Feb 15	Jim Montgomery	Head Coach
55	Sat Feb 17	Joe Sacco	Assistant Coach
58	Thu Feb 22	Joe Sacco	Assistant Coach
59	Sat Feb 24	Jim Montgomery	Head Coach
60	Mon Feb 26	Jim Montgomery	Head Coach

PlayerID	PlayerName	PositionID	
12	Brad Marchand	F2	
NULL	HULL	HULL	