

TUMMY MABUZA

Practical exercise: Soccer SQL Questions(Microsoft Server)

1.

```
--View the first 100 rows of the dataset to understand its structure.  
SELECT TOP 100*  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
--2. Count the total number of players in the dataset.  
SELECT COUNT(*) AS total_players  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
--3. List all unique teams in the league.  
SELECT DISTINCT team  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
ORDER BY team;  
--4. Count how many players are in each team.  
SELECT team  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
GROUP BY team;
```

Ln: 3, Ch: 46 | (63 chars, 2 lines) | SPC | CRLF | Windows 12

player_name	team	date_of_birth	age	marital_status	number_of_kids	nationality	country_of_birth	position
Siyanda Dlamini	Stellenbosch FC	1995-05-28	30	Widowed	0	South African	South African	Defende
Thabo Ndlovu	Cape Town City	2004-06-01	21	Single	1	Zimbabwean	Zimbabwean	Forward
Vusi Molefe	Stellenbosch FC	2006-09-20	19	Single	0	Nigerian	Nigerian	Forward
Thembi Mahlangu	Bloemfontein Celtic	2004-02-08	21	Divorced	0	Zambian	Zambian	Goalkee
Nokuthula Sithole	Polokwane City	2003-03-18	22	Divorced	3	Nigerian	Nigerian	Goalkee
Thembi Sithole	Kaizer Chiefs	1989-02-14	36	Married	2	Nigerian	Nigerian	Goalkee
Siyanda Mahlangu	Chippa United	1989-12-09	36	Single	0	Zambian	Zambian	Defende
Lerato Mashaba	Polokwane City	1998-01-31	27	Widowed	0	Ghanaian	Ghanaian	Forward

2.

```
--2. Count the total number of players in the dataset.  
SELECT COUNT(*) AS total_players  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
--3. List all unique teams in the league.  
SELECT DISTINCT team  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
ORDER BY team;  
--4. Count how many players are in each team.  
SELECT team
```

Ln: 7, Ch: 1 | (81 chars, 2 lines) | SPC

total_players
300

3.

```
--3. List all unique teams in the league.  
SELECT DISTINCT team  
FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
ORDER BY team;  
--4. Count how many players are in each team.  
SELECT team,  
       COUNT(*) AS players_per_team  
  FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
 GROUP BY team  
 ORDER BY players_per_team DESC;  
--5. Identify the top 10 players with the most goals.  
SELECT TOP 10 player_name
```

Ln: 8, Ch: 1 | (83 chars, 3 lines) | SPC

team
AmaZulu FC
Bloemfontein Celtic
Cape Town City
Chippa United
Golden Arrows
Kaizer Chiefs
Mamelodi Sundowns
Moroka Swallows
Orlando Pirates

4.

```
11      --4. Count how many players are in each team.
12      SELECT team,
13             COUNT(*) AS players_per_team
14             FROM [dbo].[ketro_sa_soccer_dataset_advanced]
15             GROUP BY team
16             ORDER BY players_per_team DESC;
17      --5. Identify the top 10 players with the most goals.
18      SELECT TOP 10 player_name,
19             team,
20             goals
21             FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

Ln: 17, Ch: 1 | (163 chars, 5 lines)

	team	players_per_team
1	Polokwane City	27
2	Golden Arrows	23
3	AmaZulu FC	22
4	Chippa United	21
5	Stellenbosch FC	20
6	SuperSport United	20
7	TS Galaxy	20
8	Kaizer Chiefs	20
9	Mamelodi Sundowns	19

5.

```
10          ORDER BY players_per_team DESC;
11      --5. Identify the top 10 players with the most goals.
12      SELECT TOP 10 player_name,
13             team,
14             goals
15             FROM [dbo].[ketro_sa_soccer_dataset_advanced]
16             ORDER BY goals DESC;
17      --6. Find the average salary for players in each team.
18      SELECT team
```

Ln: 22, Ch: 27 | (133 chars, 5 lines) | SPC | CRL

	player_name	team	goals
1	Siyanda Mabena	Sekhukhune United	118
2	Kagiso Phiri	Richards Bay FC	117
3	Zanele Phiri	TS Galaxy	117
4	Zanele Molefe	SuperSport United	116
5	Nokuthula Mabena	SuperSport United	114
6	Lindiwe Molefe	Chippa United	114
7	Nokuthula Mthembu	Mamelodi Sundowns	114
8	Karabo Phiri	Chippa United	114
9	Lindiwe Radebe	Chippa United	113

6.

```
23          ORDER BY avg_salary DESC;
24      --6. Find the average salary for players in each team.
25      SELECT team,
26             AVG(average_salary_zar) AS avg_salary
27             FROM [dbo].[ketro_sa_soccer_dataset_advanced]
28             GROUP BY team
29             ORDER BY avg_salary DESC;
30      --7. Retrieve the top 10 players with the highest market value.
31      SELECT TOP 10 player_name
```

Ln: 28, Ch: 30 | (156 chars, 5 lines)

	team	avg_salary
1	Royal AM	209078.330729167
2	Cape Town City	208407.431770833
3	Golden Arrows	199057.643851902
4	SuperSport United	195482.980664062
5	Mamelodi Sundowns	194404.484375
6	Richards Bay FC	193006.200270433
7	Kaizer Chiefs	188954.461621094
8	Moroka Swallows	186786.828330592
9	TS Galaxy	184719.574609375

7.

```
29    --7. Retrieve the top 10 players with the highest market value.
30    SELECT TOP 10 player_name,
31              team,
32              market_value_zar
33        FROM [dbo].[ketro_sa_soccer_dataset_advanced]
34        ORDER BY market_value_zar;
35    --8. Calculate the average passing accuracy for each position.
```

100 % 2 0 ↑ ↓ Ln: 35, Ch: 1 | (230 chars, 6 lines) | SPC | CRLF | Windows

	player_name	team	market_value_zar
1	Nomsa Dlamini	Kaizer Chiefs	557228.4375
2	Boitumelo Mabaso	AmaZulu FC	707853.8125
3	Sipho Radebe	Cape Town City	729981.875
4	Lebogang Mashaba	Stellenbosch FC	791604.8125
5	Nomsa Radebe	Kaizer Chiefs	818906.75
6	Nomsa Khumalo	Moroka Swallows	849179.5
7	Nomsa Hlongwane	Golden Arrows	975559.375
8	Mpho Zulu	TS Galaxy	1061705.375
9	Tumelo Zulu	AmaZulu FC	1083334.625

8.

```
35    --8. Calculate the average passing accuracy for each position.
36    SELECT position,
37              AVG(passing_accuracy) AS avg_passing_accuracy
38        FROM [dbo].[ketro_sa_soccer_dataset_advanced]
39        GROUP BY position
40        ORDER BY avg_passing_accuracy;
41
42    --9. Compare shot accuracy with goals to find correlations.
43    SELECT player_name,
44              team,
```

100 % 0 issues found Ln: 35, Ch: 1 | (247 chars, 6 lines) | SPC | CRLF | Windows

	position	avg_passing_accuracy
1	Defender	82.6642859322684
2	Midfielder	82.817721596247
3	Forward	83.210843373494
4	Goalkeeper	83.9397055682014

9.

```
42    --9. Compare shot accuracy with goals to find correlations.
43    SELECT player_name,
44              team,
45              goals,
46              shot_accuracy
47        FROM [dbo].[ketro_sa_soccer_dataset_advanced]
48        ORDER BY shot_accuracy DESC;
49    --10. Compute total goals and assists for each team.
50    SELECT team,
```

100 % 1 0 ↑ ↓ Ln: 49, Ch: 1 | (217 chars, 7 lines) | SPC | CRLF | Windows

	player_name	team	goals	shot_accuracy
1	Mandla Baloyi	Cape Town City	4	84.9000015258789
2	Nomsa Molefe	SuperSport United	1	84.9000015258789
3	Lindiwe Molefe	Chippa United	114	84.9000015258789
4	Thembi Mashaba	Orlando Pirates	4	84.8000030517578
5	Thabo Phiri	Moroka Swallows	105	84.6999969482422
6	Sipho Baloyi	Polokwane City	91	84.5999984741211
7	Sibusiso Radebe	Polokwane City	36	84.5
8	Mpho Hlongwane	SuperSport United	6	84.4000015258789
9	Sipho Mabaso	SuperSport United	4	84.0999984741211

10.

```
49 --10. Compute total goals and assists for each team.
50
51     SELECT team,
52             SUM(goals) AS goals_scored,
53             SUM(assists) AS total_assists
54         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
55         GROUP BY team
56         ORDER BY goals_scored DESC;
57 --11. Count players by their marital status.
58     SELECT marital_status,
59             COUNT(*) AS total_players
60         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

Results

team	goals_scored	total_assists
Polokwane City	1300	783
Sekhukhune United	842	608
Moroka Swallows	729	452
Stellenbosch FC	725	514
Chippa United	684	205
Golden Arrows	676	519
Bloemfontein Celtic	613	566
Kaizer Chiefs	597	481
SuperSport United	580	514

11.

```
--11. Count players by their marital status.
56     SELECT marital_status,
57             COUNT(*) AS total_players
58         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
59         GROUP BY marital_status
60         ORDER BY total_players;
61 --12. Count players by nationality.
62     SELECT nationality,
63             COUNT(*) AS players_count
64         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

Results

marital_status	total_players
Married	65
Divorced	78
Widowed	78
Single	79

12.

```
62 --12. Count players by nationality.
63     SELECT nationality,
64             COUNT(*) AS players_count
65         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
66         GROUP BY nationality
67         ORDER BY players_count;
68 --13. Find average market value grouped by nationality.
69     SELECT nationality,
70             AVG(market_value_zar) AS avg_market_value
71         FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

Results

nationality	players_count
Mozambican	37
Nigerian	39
Malawian	42
Zambian	44
Zimbabwean	45
South African	46
Ghanaian	47

13.

```
68 --13. Find average market value grouped by nationality.
69 SELECT nationality,
70     AVG(market_value_zar) AS avg_market_value
71 FROM [dbo].[ketro_sa_soccer_dataset_advanced]
72 GROUP BY nationality
73 ORDER BY avg_market_value;
74 --14. Determine how many player contracts end in each year.
75 SELECT contract_end_year,
76     COUNT(*) AS players_with_contract_end
77 FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

Results

nationality	avg_market_value
Zimbabwean	10367909.4708333
Malawian	11727296.014881
South African	12037870.1983696
Ghanaian	12298308.0079787
Zambian	12777043.0852273
Mozambican	14736203.4746622
Nigerian	15069261.3477564

14.

```
74 --14. Determine how many player contracts end in each year.
75 SELECT contract_end_year,
76     COUNT(*) AS players_with_contract_end
77 FROM [dbo].[ketro_sa_soccer_dataset_advanced]
78 GROUP BY contract_end_year
79 ORDER BY contract_end_year;
80 --15. Identify players whose contracts end next year.
```

Results

contract_end_year	players_with_contract_end
2026	63
2027	70
2028	52
2029	50
2030	65

15.

```
80 --15. Identify players whose contracts end next year.
81 SELECT player_name,
82     team,
83     contract_end_year
84 FROM [dbo].[ketro_sa_soccer_dataset_advanced]
85 WHERE contract_end_year='2026';
86 --16. Summarize the number of players by injury status.
87 SELECT injury_status,
88     COUNT(*) AS number_of_players
89 FROM [dbo].[ketro_sa_soccer_dataset_advanced]
90 GROUP BY injury_status;
```

Results

player_name	team	contract_end_year
Siyanda Dlamini	Stellenbosch FC	2026
Vusi Molefe	Stellenbosch FC	2026
Nokuthula Sithole	Polokwane City	2026
Siyanda Mahlangu	Chippa United	2026
Nomsa Mahlangu	Polokwane City	2026
Thembi Mokoena	Stellenbosch FC	2026
Thabo Sithole	Bloemfontein Celtic	2026
Kagiso Phiri	Bloemfontein Celtic	2026
Thembi Tshabalala	Cape Town City	2026

16.

```
86      --16. Summarize the number of players by injury status.  
87      SELECT injury_status,  
88          COUNT(*) AS number_of_players  
89      FROM [dbo].[ketro_sa_soccer_dataset_advanced]  
90      GROUP BY injury_status;  
91  
92      --17. Calculate goals per match ratio for each player.  
93      SELECT player_name,  
94          goals,  
95          matches_played,  
96          ROUND(goals/NNULLIF(matches_played,0),2) AS goals_per_match_ratio
```

100 % ▾

✖ 1 ⚠ 0 ↑ ↓ Ln: 91, Ch: 1

	injury_status	number_of_players
1	Healthy	99
2	Injured	97
3	Recovering	104

17.

```
92      --17. Calculate goals per match ratio for each player.  
93      SELECT player_name,  
94          goals,  
95          matches_played,  
96          ROUND(goals/NNULLIF(matches_played,0),2) AS goals_per_match_ratio  
97      FROM [dbo].[ketro_sa_soccer_dataset_advanced];  
98  
99      --18. Count how many players are managed by each agent.  
100     SELECT agent,  
101         COUNT(*) AS number_of_players  
102     FROM [dbo].[ketro_sa_soccer_dataset_advanced]
```

100 % ▾

✖ 1 ⚠ 0 ↑ ↓ Ln: 97, Ch: 50 | (235 chars, 6 line)

	player_name	goals	matches_played	goals_per_match_ratio
1	Siyanda Dlamini	9	53	0
2	Thabo Ndlovu	98	272	0
3	Vusi Molefe	99	398	0
4	Thembi Mahlangu	1	135	0
5	Nokuthula Sithole	2	116	0
6	Thembi Sithole	3	279	0
7	Siyanda Mahlangu	6	18	0
8	Lerato Mashaba	77	241	0
9	Nomsa Mahlangu	80	322	0

18.

```
99      --18. Count how many players are managed by each agent.
100     SELECT agent,
101         COUNT(*) AS number_of_players
102     FROM [dbo].[ketro_sa_soccer_dataset_advanced]
103     GROUP BY agent
104     ORDER BY number_of_players;
105
106      --19. Calculate average height and weight by player position.
107     SELECT position,
108         AVG(height_cm) AS avg_height_cm,
109         AVG(weight_kg) AS avg_weight_kg
```

100 % ▾

Ln: 105, Ch: 1 | (210 chars)

Results Messages Client Statistics

	agent	number_of_players
1	SA Elite Agents	51
2	SoccerLink Africa	62
3	None	62
4	ProSport	62
5	PlayerFirst	63

19.

```
105      --19. Calculate average height and weight by player position.
106      SELECT position,
107          AVG(height_cm) AS avg_height_cm,
108          AVG(weight_kg) AS avg_weight_kg
109      FROM [dbo].[ketro_sa_soccer_dataset_advanced]
110      GROUP BY position
111      ORDER BY position;
112
113      --20. Identify players with the highest combined goals and assists.
114      SELECT TOP 10
115          player_name
```

100 % ▾

Ln: 111, Ch: 21 | (247 chars, 7 lines)

Results Messages Client Statistics

	position	avg_height_cm	avg_weight_kg
1	Defender	182	78
2	Forward	179	78
3	Goalkeeper	179	78
4	Midfielder	179	76

20.

```
--20. Identify players with the highest combined goals and assists.
SELECT TOP 10
    player_name,
    team,
    goals,
    assists,
    (goals+assists) AS total_contribution
FROM [dbo].[ketro_sa_soccer_dataset_advanced]
ORDER BY total_contribution DESC
```

100 % 1 0 ↑ ↓ Ln: 120, Ch: 38 | (305 chars, 9 lines) SPC CI

Results Messages Client Statistics

	player_name	team	goals	assists	total_contribution
1	Siyanda Mabena	Sekhukhune United	118	75	193
2	Zanele Molefe	SuperSport United	116	76	192
3	Vusi Radebe	Stellenbosch FC	112	76	188
4	Ayanda Sithole	Golden Arrows	107	72	179
5	Ayanda Sithole	Bloemfontein Celtic	110	68	178
6	Vusi Molefe	Stellenbosch FC	99	77	176
7	Thembi Phiri	Royal AM	102	71	173
8	Gugu Mahlangu	Bloemfontein Celtic	106	65	171
9	Nokuthula Mabena	SuperSport United	114	53	167