MIkateko Mpapele

MS SQL Server Practical (Databricks)

1. Query to retrieve the first 100 rows of dataset to obtain an overview of data

```
38    --query to retrieve the first 100 rows of the dataset for an overview of structure
39
40    SELECT * FROM soccer_analysis
41    LIMIT 100;
42
```

	player_name	team	date_of_birth	age	marital_status	number_of_kids	nationality	country_of_birth	position
1	Siyanda Dlamini	Stellenbosch FC	1995-05-28	30	Widowed	0	South African	South African	Defender
2	Thabo Ndlovu	Cape Town City	2004-06-01	21	Single	1	Zimbabwean	Zimbabwean	Forward
3	Vusi Molefe	Stellenbosch FC	2006-09-20	19	Single	0	Nigerian	Nigerian	Forward
4	Thembi Mahlangu	Bloemfontein Cel...	2004-02-08	21	Divorced	0	Zambian	Zambian	Goalkeeper
5	Nokuthula Sithole	Polokwane City	2003-03-18	22	Divorced	3	Nigerian	Nigerian	Goalkeeper
6	Thembi Sithole	Kaizer Chiefs	1989-02-14	36	Married	2	Nigerian	Nigerian	Goalkeeper
7	Siyanda Mahlangu	Chippa United	1989-12-09	36	Single	0	Zambian	Zambian	Defender
8	Lerato Mashaba	Polokwane City	1998-01-31	27	Widowed	0	Ghanaian	Ghanaian	Forward
9	Nomsa Mahlangu	Polokwane City	1991-07-16	34	Divorced	0	Malawian	Malawian	Forward

2. Query to count the number of players in dataset

```
7    --query to count the number of players in the dataset
8    SELECT COUNT(*) AS total_records
9    FROM soccer_analysis;
10
```

Add parameter

← Results 2 of 2 →   Table ∨   +

	total_records
1	300

3. Query to list unique teams in the dataset

```
11    --query to retrieve data on the unique teams in the dataset
12    SELECT DISTINCT team
13    FROM soccer_analysis;
```

Add parameter

Table ∨   +

	team
10	Sekhukhune United
11	Golden Arrows
12	Orlando Pirates
13	Mamelodi Sundowns

4. Query to count the number of players in each team

```
16    --query to count the number of players in each team
17    SELECT team, COUNT(*) AS total_players
18    FROM soccer_analysis
19    GROUP BY team
20    ORDER BY total_players DESC;
```

team	total_players
1	Polokwane City	27
2	Golden Arrows	23
3	AmaZulu FC	22
4	Chippa United	21
5	Stellenbosch FC	20
6	TS Galaxy	20
7	Kaizer Chiefs	20
8	SuperSport United	20
9	Moroka Swallows	19
10	Mamelodi Sundowns	19
11	Royal AM	18
12	Bloemfontein Celtic	17

5. Query to identify top goal scorers

```
22  --query to determine top 10 goal scorers
23  SELECT player_name, goals
24  FROM soccer_analysis
25  ORDER BY goals DESC
26  LIMIT 10;
```

player_name	goals
1	Siyanda Mabena	118
2	Zanele Phiri	117
3	Kagiso Phiri	117
4	Zanele Molefe	116
5	Karabo Phiri	114
6	Nokuthula Mabena	114
7	Lindiwe Molefe	114
8	Nokuthula Mthembu	114
9	Lindiwe Radebe	113
10	Vusi Mabena	113

6. Query to identify average salary of players in each team

```
28  --query to identify average salary of players in each team
29  SELECT player_name,team,average_salary_zar
30  FROM soccer_analysis;
31
32
```

	player_name	team	average_salary_zar
1	Siyanda Dlamini	Stellenbosch FC	192131.91
2	Thabo Ndlovu	Cape Town City	266951.18
3	Vusi Molefe	Stellenbosch FC	131890.68
4	Thembi Mahlangu	Bloemfontein Celtic	324162.11
5	Nokuthula Sithole	Polokwane City	315339.82
6	Thembi Sithole	Kaizer Chiefs	131190.53
7	Siyanda Mahlangu	Chippa United	30139.73

7. Query to identify players and their average market value

```
32    --query to identify each player's market value
33
34    SELECT player_name, team, market_value_zar
35    FROM soccer_analysis
36    ORDER BY market_value_zar DESC
37    LIMIT 10;
38
```

	player_name	team	market_value_zar
1	Ayanda Mabaso	Bloemfontein Celtic	24979190.35
2	Lebogang Mabena	Mamelodi Sundowns	24887821.58
3	Gugu Mashaba	Moroka Swallows	24868294.94
4	Kagiso Mokoena	Golden Arrows	24550182.81
5	Boitumelo Radebe	Sekhukhune United	24540830.44
6	Thabo Ndlovu	Mamelodi Sundowns	24380712.61
7	Sipho Mashaba	Golden Arrows	24342131.59
8	Lerato Ngobeni	AmaZulu FC	24231618.07
9	Thabo Tshabalala	Cape Town City	24229791.64
10	Lerato Tshabalala	Chippa United	24226785.17

8. Query to calculate average passing accuracy for each position

```
39    --query to calculate average passing accuracy for each position
40    SELECT DISTINCT position, ROUND(AVG(passing_accuracy),2) AS ave_passing_accuracy
41    FROM soccer_analysis
42    GROUP BY position
43    ORDER BY ave_passing_accuracy DESC;
44
45
```

	position	ave_passing_accuracy
1	Goalkeeper	83.94
2	Forward	83.21
3	Midfielder	82.82
4	Defender	82.66

9. Query to compare average shot accuracy with goals

```
45   --query to compare shot accuracy to goals
46
47   SELECT team, ROUND(AVG(shot_accuracy),2 ) AS avg_shot_accuracy, SUM(goals) AS total_goals
48   FROM soccer_analysis
49   GROUP BY team;
50
```

	team	avg_shot_accuracy	total_goals
1	Stellenbosch FC	67.58	725
2	Cape Town City	69.83	374
3	Bloemfontein Celtic	63.08	613
4	Polokwane City	63.6	1300
5	Kaizer Chiefs	60.46	597
6	Chippa United	61.21	684
7	TS Galaxy	63.06	541
8	SuperSport United	68.06	580
9	Royal AM	66.57	544
10	Sekhukhune United	67.21	842

10. Query to compute total goals and total assists for each team

```
51   --query to compute assists and goals for each team
52
53   SELECT team, SUM(goals) AS total_goals, SUM(assists) AS total_assists
54   FROM soccer_analysis
55   GROUP BY team
56   ORDER BY total_goals,total_assists;
57
```

	team	total_goals	total_assists
1	Orlando Pirates	170	225
2	Cape Town City	374	284
3	Richards Bay FC	453	273
4	TS Galaxy	541	337
5	Royal AM	544	480
6	AmaZulu FC	546	568
7	Mamelodi Sundow...	570	475
8	SuperSport United	580	514
9	Kaizer Chiefs	597	481
10	Bloemfontein Celtic	613	566
11	Golden Arrows	676	519

11. Query to count players by their marital status

```
59   -- query to count number of players by marital status
60   SELECT marital_status, COUNT(*) AS total_per_marital_status
61   FROM soccer_analysis
62   GROUP BY marital_status
63   ORDER BY total_per_marital_status DESC;
64
```

	marital_status	total_per_marital_status
1	Single	79
2	Widowed	78
3	Divorced	78
4	Married	65

12. Query to count players by nationality

```
65    --query to count players by nationality
66    SELECT nationality,COUNT(*) total_players
67    FROM soccer_analysis
68    GROUP BY nationality
69    ORDER BY total_players DESC;
70
```

	nationality	total_players
1	Ghanaian	47
2	South African	46
3	Zimbabwean	45
4	Zambian	44
5	Malawian	42
6	Nigerian	39
7	Mozambican	37

13. Query to compute average salary grouped by nationality

```
71    --query to group average salary by nationality
72
73    SELECT DISTINCT nationality, ROUND(average_salary_zar,2) AS ave_salary
74    FROM soccer_analysis
75    GROUP BY nationality, ave_salary
76    ORDER BY ave_salary DESC;
```

	nationality	ave_salary
1	Malawian	349720.39
2	South African	349503.66
3	South African	349478.25
4	South African	347307.26
5	Zimbabwean	344978.16
6	Malawian	343481.45
7	Zimbabwean	340623.23
8	Malawian	339581.5
9	Ghanaian	339205.83
10	Mozambican	338735.18

14. Query calculate how many players contract end in each year

```
78    --query to compute contract end years total
79    SELECT contract_end_year, COUNT(*) AS total_players
80    FROM soccer_analysis
81    GROUP BY contract_end_year
82    ORDER BY total_players DESC;
83
```

	1^2_3 contract_end_year	1^2_3 total_players
1	2027	70
2	2030	65
3	2026	63
4	2028	52
5	2029	50

15. Query compute players whose contracts end in 2026

```
84   --query to identify players whose contracts end in 2026
85   SELECT player_name, team, contract_end_year
86   FROM soccer_analysis
87   WHERE contract_end_year = 2026;
88
89
```

	^A_C player_name	^A_C team	1^2_3 contract_end_year
1	Siyanda Dlamini	Stellenbosch FC	2026
2	Vusi Molefe	Stellenbosch FC	2026
3	Nokuthula Sithole	Polokwane City	2026
4	Siyanda Mahlangu	Chippa United	2026
5	Nomsa Mahlangu	Polokwane City	2026
6	Thembi Mokoena	Stellenbosch FC	2026
7	Thabo Sithole	Bloemfontein Celtic	2026
8	Kagiso Phiri	Bloemfontein Celtic	2026
9	Thembi Tshabalala	Cape Town City	2026
10	Mandla Baloyi	Kaizer Chiefs	2026
11	Tumelo Mokoena	SuperSport United	2026

16. Query to summarize number of players by injury status

```
89   --query to count number of players/classify players by injury status
90
91   SELECT injury_status, COUNT(*) AS total_players
92   FROM soccer_analysis
93   GROUP BY injury_status
94   ORDER BY total_players DESC;
```

	^A_C injury_status	1^2_3 total_players
1	Recovering	104
2	Healthy	99
3	Injured	97

17. Query to compute goals per match ratio for each player

```
96   --query to compute goals per match ration for each player
97
98   SELECT player_name, team, ROUND(goals/matches_played,2) AS match_game_ratio
99   FROM soccer_analysis
100  ORDER BY match_game_ratio DESC;
101
```

	player_name	team	match_game_ratio
1	Thembi Zulu	Sekhukhune United	24
2	Thabo Mthembu	Moroka Swallows	17.6
3	Gugu Tshabalala	TS Galaxy	6.33
4	Lindiwe Mabaso	Mamelodi Sundow...	5.15
5	Mpho Zulu	TS Galaxy	5
6	Sipho Tshabalala	Stellenbosch FC	4.23
7	Boitumelo Nkosi	Stellenbosch FC	3.84
8	Karabo Tshabalala	Stellenbosch FC	3.53
9	Lindiwe Zulu	Kaizer Chiefs	3.09
10	Sipho Phiri	Royal AM	2.76
11	Sipho Dlamini	TS Galaxy	1.95

18. Query to compute how many players are managed by each agent

```
102    --query to compute players managed by each agent
103
104    SELECT agent, COUNT(*) AS total_players
105    FROM soccer_analysis
106    GROUP BY agent
107    ORDER BY total_players DESC;
108
109
```

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

19. Query to compute average height and average weight of players by position

```
109    --query to compute average weight and height by player position
110    SELECT position, ROUND(AVG(weight_kg),2) AS ave_weight, ROUND(AVG(height_cm),1) AS ave_height
111    FROM soccer_analysis
112    GROUP BY position
113    ORDER BY ave_weight DESC;
114
```

	position	ave_weight	ave_height
1	Goalkeeper	78.99	179.3
2	Forward	78.76	179.2
3	Defender	78.13	182.4
4	Midfielder	76.04	179.4

20. Query to compute a combination of highest goals and assist for players - top ten

```sql
115    --query to identify players by the highest goals and assists
116
117    SELECT player_name, max(goals) AS total_goals,max(assists) AS total_assists
118    FROM soccer_analysis
119    GROUP BY player_name
120    ORDER BY total_goals DESC,total_assists DESC
121    LIMIT 10;
122
```

	player_name	total_goals	total_assists
1	Siyanda Mabena	118	75
2	Kagiso Phiri	117	78
3	Zanele Phiri	117	44
4	Zanele Molefe	116	76
5	Karabo Phiri	114	70
6	Nokuthula Mabena	114	53
7	Nokuthula Mthembu	114	21
8	Lindiwe Molefe	114	6
9	Lindiwe Radebe	113	41
10	Vusi Mabena	113	18