

 **STEEL DATA**



SQL Case Study
**Challenge 2 – Esports
Tournament**

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The top eSports competitors from across the globe have gathered to battle it out

Can you analyze the following data to find out all about the tournament?



Create and insert in Teams Tables



```
•CREATE TABLE Teams (  
•team_id INT PRIMARY KEY,  
•team_name VARCHAR(50) NOT NULL,  
•country VARCHAR(50),  
•captain_id INT  
•);  
•-----  
•INSERT INTO Teams (team_id, team_name, country, captain_id)  
•VALUES (1, 'Cloud9', 'USA', 1),  
•(2, 'Fnatic', 'Sweden', 2),  
•(3, 'SK Telecom T1', 'South Korea', 3),  
•(4, 'Team Liquid', 'USA', 4),  
•(5, 'G2 Esports', 'Spain', 5);
```



```
•CREATE TABLE Players (  
•player_id INT PRIMARY KEY,  
•player_name VARCHAR(50) NOT NULL,  
•team_id INT,  
•role VARCHAR(50),  
•salary INT,  
•FOREIGN KEY (team_id) REFERENCES  
Teams(team_id)  
•);
```

```
•INSERT INTO Players (player_id,  
player_name, team_id, role, salary)  
•VALUES (1, 'Shroud', 1, 'Rifler', 100000),  
•(2, 'JW', 2, 'AWP', 90000),  
•(3, 'Faker', 3, 'Mid laner', 120000),  
•(4, 'Stewie2k', 4, 'Rifler', 95000),  
•(5, 'Perkz', 5, 'Mid laner', 110000),  
•(6, 'Castle09', 1, 'AWP', 120000),  
•(7, 'Pike', 2, 'Mid Laner', 70000),  
•(8, 'Daron', 3, 'Rifler', 125000),  
•(9, 'Felix', 4, 'Mid Laner', 95000),  
•(10, 'Stadz', 5, 'Rifler', 98000),  
•(11, 'KL34', 1, 'Mid Laner', 83000),  
•(12, 'ForceZ', 2, 'Rifler', 130000),  
•(13, 'Joker', 3, 'AWP', 128000),  
•(14, 'Hari', 4, 'AWP', 90000),  
•(15, 'Wringer', 5, 'Mid laner', 105000);
```

```
•CREATE TABLE Matches (
•match_id INT PRIMARY KEY,
•team1_id INT,
•team2_id INT,
•match_date DATE,
•winner_id INT,
•score_team1 INT,
•score_team2 INT,
•FOREIGN KEY (team1_id) REFERENCES
Teams(team_id),
•FOREIGN KEY (team2_id) REFERENCES
Teams(team_id),
•FOREIGN KEY (winner_id) REFERENCES
Teams(team_id)
•);
```

```
•INSERT INTO Matches (match_id,
team1_id, team2_id, match_date,
winner_id, score_team1, score_team2)
•VALUES (1, 1, 2, '2022-01-01', 1, 16, 14),
•(2, 3, 5, '2022-02-01', 3, 14, 9),
•(3, 4, 1, '2022-03-01', 1, 17, 13),
•(4, 2, 5, '2022-04-01', 5, 13, 12),
•(5, 3, 4, '2022-05-01', 3, 16, 10),
•(6, 1, 3, '2022-02-01', 3, 13, 17),
•(7, 2, 4, '2022-03-01', 2, 12, 9),
•(8, 5, 1, '2022-04-01', 1, 11, 15),
•(9, 2, 3, '2022-05-01', 3, 9, 10),
•(10, 4, 5, '2022-01-01', 4, 13, 10);
```



Teams

team_id	team_name	country	captain_id
1	Cloud9	USA	1
2	Fnatic	Sweden	2
3	SK Telecom T1	South Korea	3
4	Team Liquid	USA	4
5	G2 Esports	Spain	5

Players

player_id	player_name	team_id	role	salary
1	Shroud	1	Rifler	100000
2	JW	2	AWP	90000
3	Faker	3	Mid Laner	120000
4	Stewie2K	4	Rifler	95000
5	Perkz	5	Mid Laner	110000
6	Castle09	1	AWP	120000
7	Pike	2	Mid Laner	70000
8	Daron	3	Rifler	125000
9	Felix	4	Mid Laner	95000
10	Stadz	5	Rifler	98000
11	KL34	1	Mid Laner	83000
12	ForceZ	2	Rifler	130000
13	Joker	3	AWP	128000
14	Hari	4	AWP	90000
15	Wringer	5	Mid Laner	105000

Matches

match_id	team1_id	team2_id	match_date	winner_id	score_team1	score_team2
1	1	2	2022-01-01	1	16	14
2	3	5	2022-02-01	3	14	9
3	4	1	2022-03-01	1	17	13
4	2	5	2022-04-01	5	13	12
5	3	4	2022-05-01	3	16	10
6	1	3	2022-02-01	3	13	17
7	2	4	2022-03-01	2	12	9
8	5	1	2022-04-01	1	11	15
9	2	3	2022-05-01	3	9	10
10	4	5	2022-01-01	4	13	10





Q1

What are the names of the players whose salary is greater than 100,000?

Q2

What is the team name of the player with player_id = 3?

Q3

What is the total number of players in each team?

Q4

What is the team name and captain name of the team with team_id = 2?

Q5

What are the player names and their roles in the team with team_id = 1?



Q6

What are the team names and the number of matches they have won?

Q7

What is the average salary of players in the teams with the country 'USA'?

Q8

Which team won the most matches?

Q9

What are the team names and the number of players in each team whose salary is greater than 100,000?

Q10

What is the date and the score of the match with match_id = 3?

QUESTION 1

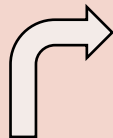


 **STEEL DATA**

1. What are the names of the players whose salary is greater than 100,000?

Query

```
SELECT player_name, salary  
FROM Players  
WHERE salary > 100000;
```



	player_name	salary
▶	Faker	120000
	Perkz	110000
	Castle09	120000
	Daron	125000
	ForceZ	130000
	Joker	128000
	Wringer	105000



QUESTION 2

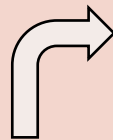


 **STEEL DATA**

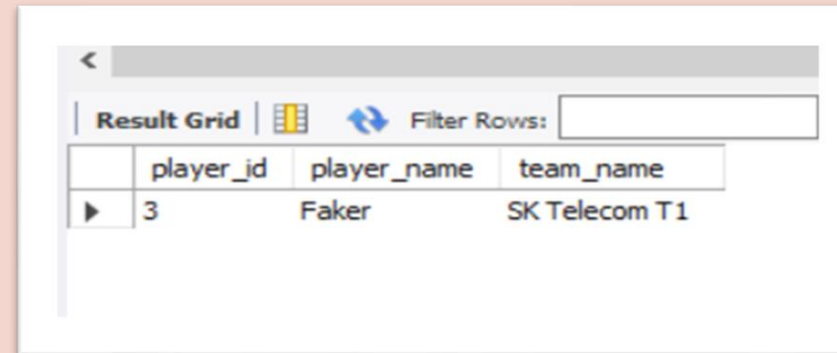
2. What is the team name of
the player with player_id = 3?

Query

```
SELECT p.player_id,  
p.player_name,  
t.team_name FROM Players  
p JOIN Teams t ON  
p.team_id = t.team_id  
WHERE p.player_id = 3;
```



OUTPUT

A screenshot of a database application's result grid. It shows a single row of data with columns for player_id, player_name, and team_name. The player_id is 3, the player_name is Faker, and the team_name is SK Telecom T1.

	player_id	player_name	team_name
▶	3	Faker	SK Telecom T1



QUESTION 3

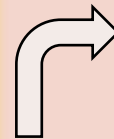


 **STEEL DATA**

What is the total number of
players in each team?

Query

```
SELECT Teams.team_id,  
Teams.team_name,  
COUNT(Players.player_id) AS  
total_players  
FROM Teams  
LEFT JOIN Players ON  
Teams.team_id =  
Players.team_id  
GROUP BY Teams.team_id,  
Teams.team_name;
```



	team_id	team_name	total_players
▶	1	Cloud9	3
	2	Fnatic	3
	3	SK Telecom T1	3
	4	Team Liquid	3
	5	G2 Esports	3




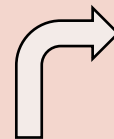
QUESTION 4



What is the team name and
captain name of the team with
team_id = 2?

Query

```
SELECT t.team_name,  
p.player_name AS  
captain_name  
FROM Teams t  
INNER JOIN Players p  
ON t.captain_id = p.player_id  
WHERE t.team_id = 2;
```

A 3D white box with a red "OUTPUT" stamp on its front face.

team_name	captain_name
Fnatic	JW



QUESTION 5


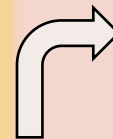


 STEEL DATA

What are the player names and
their roles in the team with
team_id = 1?

Query

```
SELECT team_id, player_name, role  
FROM Players  
WHERE team_id = 1;
```



	team_id	player_name	role
▶	1	Shroud	Rifler
	1	Castle09	AWP
	1	KL34	Mid Laner



QUESTION 6

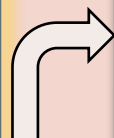


 STEEL DATA

What are the team names and
the number of matches they
have won?

Query

```
SELECT  
t.team_name,COUNT(m.winner_id) AS  
num_of_match_won  
FROM teams t JOIN matches m  
ON m.winner_id = t.team_id  
GROUP BY t.team_name  
ORDER BY COUNT(m.winner_id) DESC;
```



team_name	num_of_match_won
SK Telecom T1	4
Cloud9	3
Fnatic	1
Team Liquid	1
G2 Esports	1



QUESTION 7

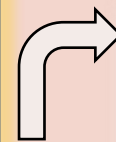


 **STEEL DATA**

What is the average salary of players in the teams with the country 'USA'?

Query

```
SELECT t.team_name,  
ROUND(AVG(p.salary),0) AS avg_salary  
FROM players p  
JOIN teams t  
ON p.team_id=t.team_id  
WHERE t.country = 'USA'  
GROUP BY t.team_name;
```



	team_name	avg_salary
▶	Cloud9	101000
	Team Liquid	93333



QUESTION 8




 STEEL DATA

Which team won the most matches?

Query

```
SELECT  
t.team_name,COUNT(m.winner_id) AS  
num_of_match_won  
FROM teams t  
JOIN matches m  
ON m.winner_id = t.team_id  
GROUP BY t.team_name  
ORDER BY COUNT(m.winner_id)  
DESC LIMIT 1;
```

OUTPUT



	team_name	num_of_match_won
▶	SK Telecom T1	4



QUESTION 9

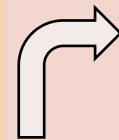


 STEEL DATA

What are the team names and the
number of players in each team
whose salary is greater than 100,000?

Query

```
SELECT t.team_id, t.team_name,  
COUNT(p.player_id) AS num_of_players  
FROM teams t  
JOIN players p  
ON p.team_id = t.team_id  
WHERE salary > 100000  
GROUP BY t.team_name, t.team_id  
ORDER BY t.team_id ASC;
```



	team_id	team_name	num_of_players
▶	1	Cloud9	1
	2	Fnatic	1
	3	SK Telecom T1	3
	5	G2 Esports	2



QUESTION 10

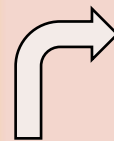


 **STEEL DATA**

What is the date and the score of
the match with match_id = 3?

Query

```
SELECT  
match_date,score_team1.score_team2  
FROM esports_tournament.matches  
WHERE match_id = 3;
```



match_date	Score_team1	Score_team2
2022-03-01	17	13





Insights



Q1

This query helps us identify the high-earning players in the teams. From the output, we can see that there are five players whose salary is greater than 100,000.

Q2

This query helps us find the team name of a specific player with player_id 3. From the output, we can see that the player with player_id 3 is on the SK Telecom T1 team.

Q3

This query helps us understand the size of each team in terms of the number of players. From the output, we can see that each team has a different number of players ranging from 2 to 4.

Q4

This query helps us find the team name and captain name of a specific team with team_id 2. From the output, we can see that the team with team_id 2 is Fnatic and their captain is JW.

Q5

This query helps us identify the players and their roles in a specific team. From the output, we can see that there are three players in the Cloud9 team and their roles are Rifler, AWP, and Mid Laner.



Insights



Q6

This query helps us see the performance of each team in terms of the number of matches they have won. From the output, we can see that the teams have won different numbers of matches ranging from 1 to 3.

Q7

The output indicates that Cloud9 has the highest average salary among the selected teams, with an average of \$101,000, while Team Liquid has the second-highest average salary at \$93,333.

Q8

This query helps us identify the team that has won the most matches. The output shows that the team 'SK Telecom T1' has won the most number of matches (4).

Q9

This query helps us identify the teams that have high-earning players and the number of such players in each team. From the output, we can see that SK Telecom T1 has the highest number of players earning a salary greater than 100000, with a total of three players, while Cloud9 and Fnatic have one player each, and G2 Esports has two players.

Q10

This query helps us retrieve information about a specific match. From the output, we can see that the match with match_id 3 was played on 2022-03-01 and Team 1 and Team 2 won with a score of 17-13.

Summary

Overall, these SQL queries provide a useful way to extract valuable insights from the Teams, Players, and Matches tables. By analyzing the data using SQL, we can identify patterns and trends that can help inform decision-making in the esports industry.

To improve performance, teams should focus on hiring players with high salaries and ensuring they have the right roles to maximize their potential. They should also track their team's performance and analyze it to identify areas that need improvement.



Thank you

