

Query 1: Join Query

Goal: Display top 5 players and their unlocked achievements.

```
SELECT p.Username, a.Name AS AchievementName, pa.DateUnlocked
FROM Player p
JOIN PlayerAchievement pa ON p.PlayerID = pa.PlayerID
JOIN Achievement a ON pa.AchievementID = a.AchievementID
ORDER BY p.Username, pa.DateUnlocked
LIMIT 5;
```

Username ▲ 1	AchievementName	DateUnlocked
SummonerA	First Blood	2023-03-01
SummonerA	Pentakill	2023-03-02
SummonerA	Ace	2023-03-03
SummonerA	Unkillable	2023-03-04
SummonerA	Farming God	2023-03-05

Query 2: Aggregation Query

Goal: Compute average playtime per player and total achievements earned.

```
SELECT p.Username,
       ROUND(AVG(m.Duration), 1) AS AvgPlaytime,
       COUNT(pa.AchievementID) AS TotalAchievements
FROM Player p
JOIN PlayerMatch pm ON p.PlayerID = pm.PlayerID
JOIN `Match` m ON pm.MatchID = m.MatchID
LEFT JOIN PlayerAchievement pa ON p.PlayerID = pa.PlayerID
GROUP BY p.Username;
```

Username	AvgPlaytime	TotalAchievements
SummonerA	30.8	25
SummonerB	33.6	20
SummonerC	33.0	15
SummonerD	29.4	10
SummonerE	32.6	10
SummonerF	40.0	1
SummonerG	25.0	1
SummonerH	25.0	1
SummonerI	38.0	1
SummonerJ	38.0	1
SummonerK	32.0	1
SummonerL	32.0	1
SummonerM	27.0	1
SummonerN	27.0	1
SummonerO	29.0	1
SummonerP	29.0	1
SummonerQ	42.0	1
SummonerR	42.0	1
SummonerS	26.0	1
SummonerT	26.0	1

Query 3: Nested Aggregation with Group By

Goal: Find total match duration per week grouped by player.

```

SELECT p.Username,
       WEEK(m.DatePlayed) AS WeekNumber,
       SUM(m.Duration) AS TotalPlaytime
FROM Player p
JOIN PlayerMatch pm ON p.PlayerID = pm.PlayerID
JOIN `Match` m ON pm.MatchID = m.MatchID
GROUP BY p.Username, WEEK(m.DatePlayed)
ORDER BY p.Username, WeekNumber;

```

Username ▲ 1	WeekNumber ▲ 2	TotalPlaytime
SummonerA	9	35
SummonerA	11	32
SummonerA	12	27
SummonerA	13	60
SummonerB	9	35
SummonerB	11	29
SummonerB	12	35
SummonerB	13	69
SummonerC	9	28
SummonerC	11	38
SummonerC	12	26
SummonerC	13	36
SummonerC	14	37
SummonerD	9	28
SummonerD	12	58
SummonerD	13	34
SummonerD	14	27
SummonerE	9	40
SummonerE	12	68
SummonerE	13	25
SummonerE	14	30
SummonerF	9	40
SummonerG	9	25
SummonerH	9	25
SummonerI	9	38

Query 4: Filtering & Ranking Query

Goal: Display the top 5 players with the highest total gold earned.

```

SELECT p.Username, SUM(ps.GoldEarned) AS TotalGold
FROM Player p
JOIN PlayerMatch pm ON p.PlayerID = pm.PlayerID
JOIN PlayerStats ps ON pm.PlayerMatchID = ps.PlayerMatchID
GROUP BY p.Username
ORDER BY TotalGold DESC
LIMIT 5;

```

Username	TotalGold ▼ 1
SummonerE	72800
SummonerB	72500
SummonerD	70800
SummonerA	66500
SummonerC	63500



















Query 5: Update Operation

Goal: Update player profile information.

UPDATE Player

SET Username = 'NewName', Rank = 'Platinum'

WHERE PlayerID = 3;






















← →		▼	PlayerID	Username	SummonerLevel	Rank	RegionID	JoinDate
<input type="checkbox"/>				1	SummonerA	120	Gold	1 2020-05-12
<input type="checkbox"/>				2	SummonerB	88	Silver	2 2019-11-01
<input type="checkbox"/>				3	NewName	150	Platinum	3 2021-07-25
<input type="checkbox"/>				4	SummonerD	45	Bronze	4 2022-02-10
<input type="checkbox"/>				5	SummonerE	200	Diamond	5 2018-09-17
<input type="checkbox"/>				6	SummonerF	30	Iron	6 2023-01-01

Query 6: Delete Operation with Cascade

Goal: Delete a player and automatically remove all associated records (matches, stats, achievements, inventory).

DELETE FROM Player

WHERE PlayerID = 4;

← T →		▼	PlayerID	Username	SummonerLevel	Rank	RegionID	JoinDate
<input type="checkbox"/>				1	SummonerA	120	Gold	1 2020-05-12
<input type="checkbox"/>				2	SummonerB	88	Silver	2 2019-11-01
<input type="checkbox"/>				3	NewName	150	Platinum	3 2021-07-25
<input type="checkbox"/>				5	SummonerE	200	Diamond	5 2018-09-17
<input type="checkbox"/>				6	SummonerF	30	Iron	6 2023-01-01
<input type="checkbox"/>				7	SummonerG	99	Silver	7 2021-03-14
<input type="checkbox"/>				8	SummonerH	170	Gold	8 2020-06-30