

1. User Upcoming Events

Show a list of all upcoming events a user is registered for in their city, sorted by date.

```
SELECT u.full_name, e.title, e.city, e.start_date
FROM Users u
JOIN Registrations r ON u.user_id = r.user_id
JOIN Events e ON r.event_id = e.event_id
WHERE e.status = 'upcoming' AND u.city = e.city
ORDER BY e.start_date;
```

full_name	title	city	start_date
Alice Johnson	Tech Innovators Meetup	New York	2025-06-10 10:00:00
Bob Smith	Frontend Development Bootcamp	Los Angeles	2025-07-01 10:00:00

2. Top Rated Events

Identify events with the highest average rating, considering only those that have received at least 10 feedback submissions.

```
SELECT e.title, AVG(f.rating) AS avg_rating, COUNT(f.feedback_id) AS total_feedbacks
FROM Events e
JOIN Feedback f ON e.event_id = f.event_id
GROUP BY e.event_id
HAVING total_feedbacks >= 10
ORDER BY avg_rating DESC;
```

No tables selected

3. Inactive Users

Retrieve users who have not registered for any events in the last 90 days.

```
SELECT u.full_name
FROM Users u
LEFT JOIN Registrations r ON u.user_id = r.user_id
GROUP BY u.user_id
HAVING MAX(r.registration_date) < CURDATE() - INTERVAL 90 DAY OR
MAX(r.registration_date) IS NULL;
```

full_name

Charlie Lee

Diana King

4. Peak Session Hours

Count how many sessions are scheduled between 10 AM to 12 PM for each event.

```
SELECT e.title, COUNT(s.session_id) AS peak_sessions
FROM Events e
JOIN Sessions s ON e.event_id = s.event_id
WHERE TIME(s.start_time) BETWEEN '10:00:00' AND '12:00:00'
GROUP BY e.event_id;
```

title	peak_sessions
-----	-----
Tech Innovators Meetup	1
Frontend Development Bootcamp	1

5. Most Active Cities

List the top 5 cities with the highest number of distinct user registrations.

```
SELECT u.city, COUNT(DISTINCT r.user_id) AS total_users
FROM Users u
JOIN Registrations r ON u.user_id = r.user_id
GROUP BY u.city
ORDER BY total_users DESC
LIMIT 5;
```

city	total_users
-----	-----
New York	2
Los Angeles	1
Chicago	1

6. Event Resource Summary

Generate a report showing the number of resources (PDFs, images, links) uploaded for each event.

```
SELECT e.title,
SUM(CASE WHEN r.resource_type = 'pdf' THEN 1 ELSE 0 END) AS pdfs,
SUM(CASE WHEN r.resource_type = 'image' THEN 1 ELSE 0 END) AS images,
SUM(CASE WHEN r.resource_type = 'link' THEN 1 ELSE 0 END) AS links
FROM Events e
```

```
LEFT JOIN Resources r ON e.event_id = r.event_id
GROUP BY e.event_id;
```

title	pdfs	images	links
Tech Innovators Meetup	1	0	0
AI & ML Conference	0	1	0
Frontend Development Bootcamp	0	0	1

7. Low Feedback Alerts

List all users who gave feedback with a rating less than 3, along with their comments and associated event names.

```
SELECT u.full_name, e.title AS event_name, f.comments
FROM Feedback f
JOIN Users u ON f.user_id = u.user_id
JOIN Events e ON f.event_id = e.event_id
WHERE f.rating < 3;
```

full_name	event_name	comments
Bob Smith	Tech Innovators Meetup	Could be better.

8. Sessions per Upcoming Event

Display all upcoming events with the count of sessions scheduled for them.

```
SELECT e.title, COUNT(s.session_id) AS session_count
FROM Events e
LEFT JOIN Sessions s ON e.event_id = s.event_id
WHERE e.status = 'upcoming'
GROUP BY e.event_id;
```

title	session_count
Tech Innovators Meetup	2
Frontend Development Bootcamp	1

9. Organizer Event Summary

For each event organizer, show the number of events created and their current status (upcoming, completed, cancelled).

```
SELECT u.full_name AS organizer, e.status, COUNT(e.event_id) AS total_events
FROM Users u
JOIN Events e ON u.user_id = e.organizer_id
GROUP BY u.user_id, e.status;
```

organizer	status	total_events
Alice Johnson	upcoming	1
Bob Smith	upcoming	1
Charlie Lee	completed	1

10. Feedback Gap

Identify events that had registrations but received no feedback at all.

```
SELECT e.title
FROM Events e
JOIN Registrations r ON e.event_id = r.event_id
LEFT JOIN Feedback f ON e.event_id = f.event_id
GROUP BY e.event_id
HAVING COUNT(f.feedback_id) = 0;
```

title
Frontend Development Bootcamp

11. Daily New User Count

Find the number of users who registered each day in the last 7 days.

```
SELECT registration_date, COUNT(*) AS user_count
FROM Users
WHERE registration_date >= CURDATE() - INTERVAL 7 DAY
GROUP BY registration_date;
```

registration_date	user_count
2025-02-01	1

12. Event with Maximum Sessions

List the event(s) with the highest number of sessions.

```
SELECT e.title, COUNT(s.session_id) AS total_sessions
FROM Events e
JOIN Sessions s ON e.event_id = s.event_id
GROUP BY e.event_id
ORDER BY total_sessions DESC
LIMIT 1;
```

title	total_sessions
Tech Innovators Meetup	2

13. Average Rating per City

Calculate the average feedback rating of events conducted in each city.

```
SELECT e.city, ROUND(AVG(f.rating), 2) AS avg_rating
FROM Events e
JOIN Feedback f ON e.event_id = f.event_id
GROUP BY e.city;
```

city	avg_rating
New York	3.00
Chicago	4.50

14. Most Registered Events

List top 3 events based on the total number of user registrations.

```
SELECT e.title, COUNT(r.registration_id) AS total_registrations
FROM Events e
JOIN Registrations r ON e.event_id = r.event_id
GROUP BY e.event_id
ORDER BY total_registrations DESC
LIMIT 3;
```

title	total_registrations
Tech Innovators Meetup	2
AI & ML Conference	2

15. Event Session Time Conflict

Identify overlapping sessions within the same event (i.e., session start and end times that conflict).

```
SELECT s1.event_id, s1.title AS session1, s2.title AS session2
FROM Sessions s1
JOIN Sessions s2 ON s1.event_id = s2.event_id AND s1.session_id < s2.session_id
WHERE s1.start_time < s2.end_time AND s1.end_time > s2.start_time;
```

	event_id session1	session2
	----- -----	-----
1	Opening Keynote	Future of Web Dev

16. Unregistered Active Users

Find users who created an account in the last 30 days but haven't registered for any events.

```
SELECT full_name
FROM Users
WHERE registration_date >= CURDATE() - INTERVAL 30 DAY
AND user_id NOT IN (SELECT user_id FROM Registrations);
```

full_name

Ethan Hunt

17. Multi-Session Speakers

Identify speakers who are handling more than one session across all events.

```
SELECT speaker_name, COUNT(*) AS total_sessions
FROM Sessions
GROUP BY speaker_name
HAVING total_sessions > 1;
```

18. Resource Availability Check

List all events that do not have any resources uploaded.

```
SELECT title
FROM Events
WHERE event_id NOT IN (SELECT DISTINCT event_id FROM Resources);
```

19. Completed Events with Feedback Summary

For completed events, show total registrations and average feedback rating.

```
SELECT e.title,  
       COUNT(DISTINCT r.registration_id) AS total_registrations,  
       ROUND(AVG(f.rating), 2) AS avg_rating  
FROM Events e  
LEFT JOIN Registrations r ON e.event_id = r.event_id  
LEFT JOIN Feedback f ON e.event_id = f.event_id  
WHERE e.status = 'completed'  
GROUP BY e.event_id;
```

title	total_registrations	avg_rating
AI & ML Conference	2	4.50

20. User Engagement Index

For each user, calculate how many events they attended and how many feedbacks they submitted.

```
SELECT u.full_name,  
       COUNT(DISTINCT r.event_id) AS events_attended,  
       COUNT(DISTINCT f.feedback_id) AS feedbacks_submitted  
FROM Users u  
LEFT JOIN Registrations r ON u.user_id = r.user_id  
LEFT JOIN Feedback f ON u.user_id = f.user_id  
GROUP BY u.user_id;
```

full_name	events_attended	feedbacks_submitted
Alice Johnson	1	0
Bob Smith	1	1
Charlie Lee	1	1
Diana King	1	1
Ethan Hunt	1	0

21. Top Feedback Providers

List top 5 users who have submitted the most feedback entries.

```
SELECT u.full_name, COUNT(f.feedback_id) AS feedback_count  
FROM Users u
```

```

JOIN Feedback f ON u.user_id = f.user_id
GROUP BY u.user_id
ORDER BY feedback_count DESC
LIMIT 5;

```

full_name	feedback_count
-----	-----
Charlie Lee	1
Diana King	1
Bob Smith	1

22. Duplicate Registrations Check

Detect if a user has been registered more than once for the same event.

```

SELECT user_id, event_id, COUNT(*) AS registrations
FROM Registrations
GROUP BY user_id, event_id
HAVING registrations > 1;

```

23. Registration Trends

Show a month-wise registration count trend over the past 12 months.

```

SELECT DATE_FORMAT(registration_date, '%Y-%m') AS month,
       COUNT(*) AS registration_count
FROM Registrations
GROUP BY month
ORDER BY month DESC;

```

month	registration_count
-----	-----
2025-06	1
2025-05	2
2025-04	2

24. Average Session Duration per Event

Compute the average duration (in minutes) of sessions in each event.

```

SELECT e.title,
       ROUND(AVG(TIMESTAMPDIFF(MINUTE, s.start_time, s.end_time)), 2) AS
avg_duration_minutes
FROM Events e

```



```
JOIN Sessions s ON e.event_id = s.event_id
GROUP BY e.event_id;
```

title	avg_duration_minutes
Tech Innovators Meetup	67.5
AI & ML Conference	90.0
Frontend Development Bootcamp	120.0

25. Events Without Sessions

List all events that currently have no sessions scheduled under them.

```
SELECT title
FROM Events
WHERE event_id NOT IN (SELECT DISTINCT event_id FROM Sessions);
```