

SQL Solution

Question 1 - Canvas

```
select StudentID
from Login_Q1
where loginTime>='2023-04-17' and loginTime<='2023-04-22'
group by StudentID
having count(distinct loginTime)=6;
```

Question 2 - Online Judge System

```
SELECT
p.ProblemID,
ROUND(
(SUM(CASE WHEN s.Status = 'Accepted' THEN 1 ELSE 0 END)+0.0) /
(COUNT(s.SubmissionID)+0.0), 2
) AS AcceptanceRate
FROM Problem_Q2 p
LEFT JOIN Submission_Q2 s ON p.ProblemID = s.ProblemID
GROUP BY p.ProblemID
ORDER BY p.ProblemID;
```

Question 3 - Scoreboard

```
select R.ParticipantID,sum(R.score_fin) as TotalScore
from (
select ParticipantID,ProblemID,max(score) as score_fin
from Submission_Q3
group by ParticipantID,ProblemID
) as R
group by R.ParticipantID
order by TotalScore desc, R.ParticipantID asc;
```

Question 4 - Global Preference

```
SELECT t.country,t.product_name,max(t.quantity) as quantity
From (
SELECT c.country,oi.product_name,sum(oi.quantity) as quantity
FROM Customers_Q4 c
JOIN Orders_Q4 o ON c.customer_id = o.customer_id
JOIN Order_Items_Q4 oi ON o.order_id = oi.order_id
GROUP BY c.country,oi.product_name
) t
GROUP BY t.country
```

Question 5 - Order Trend

```
SELECT
o.order_id,
o.order_date,
o.total_amount
FROM
Orders_Q5 o
WHERE
o.order_date BETWEEN '2022-09-01' AND '2023-01-31'
AND o.total_amount BETWEEN 200 AND 400
AND EXISTS (
SELECT 1
FROM Order_Items_Q5 oi
WHERE oi.order_id = o.order_id
GROUP BY oi.order_id
HAVING SUM(oi.quantity) >= 3
);
```

Question 6 - Comprehensive Record

```
SELECT
c.customer_name,
o.order_id,
o.order_date,
oi.product_name,
oi.quantity,
oi.unit_price
FROM
Customers_Q6 c
LEFT JOIN
Orders_Q6 o ON c.customer_id = o.customer_id
LEFT JOIN
Order_Items_Q6 oi ON o.order_id = oi.order_id;
```

Question 7 - Talent

```
SELECT talent FROM Employees_Q7 WHERE employee_id=1;
```

Question 8 - Gender

```
SELECT e.employee_id, e.employee_name  
FROM Employees_Q8 AS e, (SELECT * FROM Employees_Q8 WHERE  
Employees_Q8.employee_id=2) AS cc  
WHERE e.gender!=cc.gender;
```