SQL LEETCODE PROBLEMS

QUESTION 8

Game Play Analysis

-- Mayuri D.

Data--

```
7  •     SELECT * FROM activity;
```

player_id	device_id	event_date	games_played
1	2	2016-03-01	5
1	2	2016-03-02	6
2	3	2017-06-25	1
3	1	2016-03-02	0
3	4	2018-07-03	5

```sql
    -- q1: Write an SQL query that reports the first login date for each player
    SELECT player_id, MIN(event_date) AS firsttime_login
    FROM activity
    GROUP BY player_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

player_id	firsttime_login
1	2016-03-01
2	2017-06-25
3	2016-03-02

```sql
-- q2: Write a SQL query that reports the device that is first logged in for each player
SELECT player_id, device_id, event_date, games_played FROM
(
    SELECT *,
    RANK() OVER(PARTITION BY player_id ORDER BY event_date) AS rn
    FROM activity
) a
WHERE rn = 1;
```

player_id	device_id	event_date	games_played
1	2	2016-03-01	5
2	3	2017-06-25	1
3	1	2016-03-02	0

```sql
/* q3: Write an SQL query that reports for each player and date, how many games played so far by the player.
   That is, the total number of games played by the player until that date. */
SELECT *,
SUM(games_played) OVER(PARTITION BY player_id ORDER BY event_date) AS total_played
FROM activity;
```

player_id	device_id	event_date	games_played	total_played
1	2	2016-03-01	5	5
1	2	2016-03-02	6	11
2	3	2017-06-25	1	1
3	1	2016-03-02	0	0
3	4	2018-07-03	5	5

```sql
/* q4: Write an SQL query that reports the fraction of players that
   logged in again on the day after the day they first logged in,
   rounded to 2 decimal places */
WITH min_date AS
(
    SELECT player_id, MIN(event_date) AS first_login
    FROM activity
    GROUP BY player_id
)
SELECT a.*, first_login
FROM activity a
INNER JOIN min_date md ON a.player_id = md.player_id
WHERE DATEDIFF(event_date, first_login) = 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

player_id	device_id	event_date	games_played	first_login
1	2	2016-03-02	6	2016-03-01

THANK YOU

-- Mayuri D.