Answer Script

Question No. 01

Customers (id, Name), Orders (id, customerId)
We have these two tables. Give me the names of the customers who never ordered.

Answer No. 01

```
DROP DATABASE IF EXISTS phitron;
CREATE DATABASE phitron;
USE phitron;

CREATE TABLE customers(
        id INT PRIMARY KEY,
        _name VARCHAR(30)
);

CREATE TABLE orders(
        id INT,
        customer_id INT
);

INSERT INTO customers(id, _name)
VALUES (101, "Muktadir"),
    (102, "Raju"),
    (103, "Foysal"),
    (104, "Rahim"),
    (105, "KARIM");

SELECT * FROM customers;

INSERT INTO orders(id, customer_id)
VALUES (1, 101),
    (2, 103),
    (3, 105),
    (4, 108),
    (5, 110);

SELECT C._name
FROM customers AS C
```

```
LEFT JOIN
orders AS O
ON (C.id = O.customer_id)
WHERE O.customer_id IS NULL;
```

Question No. 02

Following tables are given. Delete the rows of Person who has duplicate emails.

Answer No. 02

```
DROP DATABASE IF EXISTS phitron;
CREATE DATABASE phitron;
USE phitron;
CREATE TABLE person(
            id INT,
    email VARCHAR(30)
);

INSERT INTO person(id, email)
VALUES (1, "john@example.com"),
            (2, "bob@example.com"),
        (3, "john@example.com");

SET sql_safe_updates = 0;
SELECT email FROM person;

CREATE TABLE Temp_Person(
SELECT MIN(id) AS id, email
FROM person
GROUP BY email
);

TRUNCATE TABLE person;

INSERT INTO person(id, email)
SELECT id, email FROM Temp_Person;

DROP TABLE Temp_Person;
SET sql_safe_updates = 1;
```

```
SELECT id, email FROM person;
```

Question No. 03

3. Look at the following table 25

```
+---------------+---------+
| Column Name   | Type    |
+---------------+---------+
| id            | int     |
| recordDate    | date    |
| temperature   | int     |
+---------------+---------+
id is the primary key for this table.
This table contains information about the temperature
on a certain day.
```

Write an SQL query to find all dates' Id with higher temperatures compared to its previous dates (yesterday).

Input:

Weather table:

```
+----+------------+-------------+
| id | recordDate | temperature |
+----+------------+-------------+
| 1  | 2015-01-01 | 10          |
| 2  | 2015-01-02 | 25          |
| 3  | 2015-01-03 | 20          |
| 4  | 2015-01-04 | 30          |
+----+------------+-------------+
```

Output:

```
+----+
| id |
+----+
| 2  |
| 4  |
+----+
```

Explanation:

In 2015-01-02, the temperature was higher than the previous day (10 -> 25).
In 2015-01-04, the temperature was higher than the previous day (20 -> 30).

Answer No. 03

```
DROP DATABASE IF EXISTS phitron;
CREATE DATABASE phitron;
USE phitron;

CREATE TABLE weather(
        id INT PRIMARY KEY,
   recordDate DATE,
   temperature INT
);

INSERT INTO weather (id, recordDate, temperature)
VALUES (1, "2015-01-01", 10),
        (2, "2015-01-02", 25),
      (3, "2015-01-03", 20),
      (4, "2015-01-04", 30);

SELECT * FROM weather;

SELECT W1.id
FROM weather AS W1
JOIN weather AS W2
ON (W1.recordDate = DATE_ADD(W2.recordDate, INTERVAL 1 DAY) )
WHERE (W1.temperature > W2.temperature);
```

Question No. 04

4. From the HR Database, determine the second highest salary of an employee. 25

Answer No. 04

```
USE hr;
SELECT DISTINCT salary as Second_Highest_Salary
FROM employees
ORDER BY salary DESC
LIMIT 1 OFFSET 1;
```