MySQL practice query

COMBINE TWO TABLES

Table: Person

+-------------+---------+

| Column Name | Type |

+-------------+---------+

| PersonId | int |

| FirstName | varchar |

| LastName | varchar |

+-------------+---------+

PersonId is the primary key column for this table.

Table: Address

+-------------+---------+

| Column Name | Type |

+-------------+---------+

| AddressId | int |

| PersonId | int |

| City | varchar |

| State | varchar |

+-------------+---------+

AddressId is the primary key column for this table.

# Write your MySQL query statement below

SELECT p.FirstName, p.LastName, a.City, a.State

FROM Person p

LEFT JOIN Address a ON p.PersonId = a.PersonId;

Nth Highest Salary

Write a SQL query to get the highest / second highest / Nth highest salary from the Employee table.

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| Id | Salary |

+----+--------+

| 1 | 100 |

| 2 | 200 |

| 3 | 300 |

+----+--------+

For example, given the above Employee table, the second highest salary is 200.

#MySQL query statement

SELECT (SELECT DISTINCT salary

FROM Employee

ORDER BY salary DESC LIMIT 1

OFFSET 1) as SecondHighestSalary;

#Nth HIGHEST SALARY

CREATE FUNCTION getNthHighestSalary(N INT) RETURNS INT

BEGIN

set N = N-1;

RETURN (

select (select distinct salary

from Employee

order by salary DESC LIMIT N, 1 )

As nTH

);

END

COMPARISON example:

Employees Earning More Than Their Managers

The Employee table holds all employees including their managers. Every employee has an Id, and there is also a column for the manager Id.

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| Id | Name | Salary | ManagerId |

+----+-------+--------+-----------+

| 1 | Joe | 70000 | 3 |

| 2 | Henry | 80000 | 4 |

| 3 | Sam | 60000 | NULL |

| 4 | Max | 90000 | NULL |

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# MySQL query statement below

SELECT Name as Employee

FROM Employee e

WHERE e.salary > (SELECT salary FROM Employee m WHERE m.id=e.ManagerId)

REDUNDANCY example: Duplicate Emails

Write a SQL query to find all duplicate emails in a table named Person.

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| Id | Email |

+----+---------+

| 1 | a@b.com |

| 2 | c@d.com |

| 3 | a@b.com |

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# MySQL query statement below

SELECT Email

FROM Person GROUP by email HAVING count(\*)>1;

COMPARE TUPLES AND ROW DATA example: Rising Temperature

Given a Weather table, write a SQL query to find all dates' Ids with higher temperature compared to its previous (yesterday's) dates.

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| Id(INT) | Date(DATE) | Temperature(INT) |

+---------+------------+------------------+

| 1 | 2015-01-01 | 10 |

| 2 | 2015-01-02 | 25 |

| 3 | 2015-01-03 | 20 |

| 4 | 2015-01-04 | 30 |

+---------+------------+------------------+

#MySQL query statement below

SELECT w1.Id

FROM Weather w1

INNER JOIN Weather w2

on TO\_DAYS(w1.Date) = TO\_DAYS(w2.Date)+1

WHERE w1.temperature > w2.temperature;