

## Question No 01

### Employees Earning More Than Their Managers

Table: Employee

Column Name	Type
id	int
name	varchar
salary	int
managerId	int

id is the primary key (column with unique values) for this table.

Each row of this table indicates the ID of an employee, their name, salary, and the ID of their manager.

**Write a solution to find the employees who earn more than their managers.**

## Question No 02

### Duplicate Emails

Table: Person

Column Name	Type
id	int
email	varchar

id is the primary key (column with unique values) for this table. Each row of this table contains an email. The emails will not contain uppercase letters.

**Write a solution to report all the duplicate emails. Note that it's guaranteed that the email field is not NULL.**

**Return the result table in any order.**

## Question No 03

### Delete Duplicate Emails

Table: Person

Column Name	Type
id	int
email	varchar

id is the primary key (column with unique values) for this table.

Each row of this table indicates the ID of an employee, their name, salary, and the ID of their manager.

**Write a solution to delete all duplicate emails, keeping only one unique email with the smallest id.**

## Question No 04

### Replace Employee ID With The Unique Identifier

Table: Employees

Column Name	Type
id	int
name	varchar

Each row of this table contains the id and the name of an employee in a company.

Table: EmployeeUNI

Column Name	Type
id	int
uniqueid	int

(id, unique\_id) is the primary key (combination of columns with unique values) for this table.

Each row of this table contains the id and the corresponding unique id of an employee in the company.

**Write a solution to show the unique ID of each user, If a user does not have a unique ID replace just show null.**

**Return the result table in any order.**

## Question No 05

### Minimum Salary in Each Department

Write a query to find the employee with the minimum salary in each department from a table Employees with columns EmployeeID, Name, DepartmentID, and Salary.

## Question No 06

### Customer with the Highest Total Order

Given a table Orders with columns OrderID, CustomerID, OrderDate, and a table OrderItems with columns OrderID, ItemID, Quantity, write a query to find the customer with the highest total order quantity.

## Question No 07

### Customers who placed their first order within the last 30 days

Given a table Customers with columns CustomerID, Name, JoinDate, and a table Orders with columns OrderID, CustomerID, OrderDate, write a query to find customers who placed their first order within the last 30 days.

## Question No 08

### Second Highest Salary

Table: Employee

Column Name	Type
id	int
salary	int

id is the primary key (column with unique values) for this table.

Each row of this table contains information about the salary of an employee.

**Write a solution to find the second highest salary from the Employee table. If there is no second highest salary, return null (return None in Pandas).**

## Question No 09

### Department Highest Salary

Table: Employee

Column Name	Type
id	int
salary	Int
name	Varchar
departmentId	int

id is the primary key (column with unique values) for this table.

departmentId is a foreign key (reference columns) of the ID from the Department table.

Each row of this table indicates the ID, name, and salary of an employee. It also contains the ID of their department.

Table: Department

Column Name	Type
id	int
name	varchar

id is the primary key (column with unique values) for this table. It is guaranteed that department name is not NULL.

Each row of this table indicates the ID of a department and its name.

**Write a solution to find employees who have the highest salary in each of the departments.**

**Return the result table in any order.**

## Question No 10

### Customers Who Bought All Products

Table: Customer

Column Name	Type
Customer_id	int
Product_key	Int

This table may contain duplicates rows.

customer\_id is not NULL.

product\_key is a foreign key (reference column) to Product table.

Table: Product

Column Name	Type
Product_key	Int

product\_key is the primary key (column with unique values) for this table.

**Write a solution to report the customer ids from the Customer table that bought all the products in the Product table.**

**Return the result table in any order.**