### Question 1

Find the names of all employees who have a higher salary than the average salary of their department.

### Question 2

List the departments that have at least one employee whose salary is greater than $60,000.

### Question 3

Find the names of all employees who are managed by 'John Smith'.

### Question 4

Retrieve the employee names and their salaries for the top 3 highest-paid employees.

### Question 5

Show the names of employees who have the same job title as 'Jane Doe'.

### Question 6

Find the names of all employees whose hire date is earlier than the average hire date of the entire company.

### Question 1

Create a view to show all employees with a salary greater than the company's average salary. Then,

### Question 2

Create a view that lists each department's highest-paid employee. Then, find the names of employees from this view who are in the 'IT' department.

### Question 3

Create a view for all employees who work in the 'Sales' or 'Marketing' departments. Then, using this view, find the average salary of those employees.

Imagine you're an HR analyst at a tech company tasked with analyzing employee salaries. Your manager is keen on understanding the pay distribution and asks you to determine the second highest salary among all employees.

It's possible that multiple employees may share the same second highest salary. In case of duplicate, display the salary only once.

**employee Schema:**

| **column\_name** | **type** | **description** |
| --- | --- | --- |
| employee\_id | integer | The unique ID of the employee. |
| name | string | The name of the employee. |
| salary | integer | The salary of the employee. |
| department\_id | integer | The department ID of the employee. |
| manager\_id | integer | The manager ID of the employee. |

**employee Example Input:**

| **employee\_id** | **name** | **salary** | **department\_id** | **manager\_id** |
| --- | --- | --- | --- | --- |
| 1 | Emma Thompson | 3800 | 1 | 6 |
| 2 | Daniel Rodriguez | 2230 | 1 | 7 |
| 3 | Olivia Smith | 2000 | 1 | 8 |

**Example Output:**

| **second\_highest\_salary** |
| --- |
| 2230 |

New TikTok users sign up with their emails. They confirmed their signup by replying to the text confirmation to activate their accounts. Users may receive multiple text messages for account confirmation until they have confirmed their new account.

A senior analyst is interested to know the activation rate of specified users in the **emails** table. Write a query to find the activation rate. Round the percentage to 2 decimal places.

Definitions:

* **emails** table contain the information of user signup details.
* **texts** table contains the users' activation information.

Assumptions:

* The analyst is interested in the activation rate of specific users in the **emails** table, which may not include all users that could potentially be found in the **texts** table.
* For example, user 123 in the **emails** table may not be in the **texts** table and vice versa.

Effective April 4th 2023, we added an assumption to the question to provide additional clarity.

### emails Table:

| **Column Name** | **Type** |
| --- | --- |
| email\_id | integer |
| user\_id | integer |
| signup\_date | datetime |

### emails Example Input:

| **email\_id** | **user\_id** | **signup\_date** |
| --- | --- | --- |
| 125 | 7771 | 06/14/2022 00:00:00 |
| 236 | 6950 | 07/01/2022 00:00:00 |
| 433 | 1052 | 07/09/2022 00:00:00 |

### texts Table:

| **Column Name** | **Type** |
| --- | --- |
| text\_id | integer |
| email\_id | integer |
| signup\_action | varchar |

### texts Example Input:

| **text\_id** | **email\_id** | **signup\_action** |
| --- | --- | --- |
| 6878 | 125 | Confirmed |
| 6920 | 236 | Not Confirmed |
| 6994 | 236 | Confirmed |

'Confirmed' in **signup\_action** means the user has activated their account and successfully completed the signup process.

### Example Output:

| **confirm\_rate** |
| --- |
| 0.67 |