Introduction to Task1. Explore the information about **Employees** – You've just started working in a relatively big organization and your boss has given you their database. Your job is to write some queries that can be used by the programmers to obtain the needed information and statistics.. In a database, called **task_employees**, you will find a table called **employees**. The table's columns are:

- employee_id – the unique identifier for each employee
- first_name – the first name of each employee
- last name – the last name of each employee
- email – each employee's email address
- phone_number - each employee's phone number
- hire_date – the date in which the employee is hired
- job_title – the title of the job for each employee
- salary – the employee's salary
- manager_id – the ID of the manager that manages the employee

Task 1. For each of the following questions from the bullet list below, you should **write a single SQL query** that outputs the results specified by each problem. **Your response should take the form of a single SQL query**. You should return only the data necessary to answer the question: if the problem only asks you to output the names of the employees, for example, then your query should not also output each employee's email address.

Let's start by outputting all the information about the employees:

```
SELECT * FROM employees;
```

- **Write a query to find all employees who work in the 'Engineering' department.**
- **Write a query to find employees whose salary is between 60,000 and 80,000.**
- **Write a query to find employees who were hired after January 1, 2020.**
- **Write a query to retrieve employee names and salaries, ordered by salary in descending order.**
- **Write a query to count the total number of employees in the company.**
- **Write a query to find all employees who report to manager ID 1.**
- **Write a query to find the employee with the highest salary.**
- **Write a query to find all employees who work in the 'Marketing' or 'Sales' department.**
- **Write a query to retrieve employee names and hire dates, ordered by the hire_date in ascending order (oldest employees first).**
- **Write a query to retrieve employees with a salary greater than 75,000 and order the results by salary in descending order.**

- **Write a query to count how many employees are in each department and display the department name and number of employees. Call the counting column “Employee Count”.**
- **Write a query to calculate the average salary in each department. Call the average salary column “Average Salary”;**
- **Write a query to find departments that have more than 5 employees. Call the counting column “Employee Count”.**
- **Write a query to count how many employees are managed by each manager (based on manager_id). Call the counting column “Employee Count”.**
- **Write a query to retrieve each department and the maximum salary within that department. Call the max salary column “Max Salary”.**
- **Write a SQL query to answer a question of your choice about the employees. The query should:**
    - **Make use of AS to rename a column**
    - **Involve at least one condition, using WHERE**
    - **Sort by at least one column, using ORDER BY**