QUESTION 2 TO 11

Que 2: Given the following table employees with columns id, name, department, salary, and hire_date, write a query to retrieve all employees who are either in the 'Sales' department with a salary greater than 50000 or in the 'HR' department hired after January 1, 2020.

```
select *
from employees
WHERE  (department='Sales' and salary>50000) or  (department='HR' and
hire_date > '2020-01-01');
```

Question 3: What is the output of the following query? SELECT name, salary FROM employees WHERE salary > 50000 AND (department = 'Sales' OR department

```
SELECT name, salary
FROM employees
WHERE salary > 50000
AND (department = 'Sales' OR department = 'HR')
ORDER BY department DESC, salary ASC;
```

Ans: This will give column **NAME** and **SALARY** from the **employees** table whose salary is more than 50 thousand and department is either **HR** or **SALES** firstly in the decreasing order of department (i.e. firstly HR then SALES) then if two data are from same department then it will give data according to ascending order of salary value.

Question 4: Write a query to retrieve all employees with salaries between 40000 and 60000, excluding those in the 'Marketing' department, and order the result by hire_date descending and salary ascending.

```
select *
from employees
WHERE  salary between 40000 and 60000 and department!='Marketing'
order by hire_date desc , salary asc;
```

Question 5: Write a query to find employees who are either not in the 'Finance' department or have a salary less than 30000, and then order the results first by department in ascending order and then by name in descending order.

```sql
select *
from employees
WHERE  salary<30000 or department='Finance'
order by department asc , name desc;
```

Question 6: Write a query to retrieve employees whose name starts with 'A', have been hired after January 1, 2015, and order the results by their name in ascending order.

```sql
select *
from employees
where name like 'A%' and hire_date > '2015-01-01'
order by name asc;
```

Question 7: Write a query to find employees who are in either the 'Engineering' department with a salary less than 70000 or the 'Design' department with a salary greater than 60000, and order the results by salary descending.

```sql
select *
from employees
where (salary< 70000 and department='Engineering') or (salary > 60000 and
department='Design')
order by salary desc;
```

Question 8: What will be the result of the following query if the employees table has columns name, salary, and hire_date?

Question incomplete

Question 9: Given the following table projects with columns project_id, project_name, start_date, and end_date, write a query to retrieve all projects that started before January 1, 2022, or ended after December 31, 2022, and order the result by project_name in descending order.

```sql
select *
from projects
where start_date < '2020-01-01' or end_date > '2020-12-31'
order by project_name desc;
```

Question 10: Write a query to find employees with a name ending with 'son', not in the 'IT' department, and order the results first by salary in descending order and then by hire_date in ascending order.

```
select *
from employees
where name like '%son' and department != 'IT'
order by salary desc, hire_date asc;
```

Question 11: Write a query to retrieve employees who were hired in the year 2021 and have a salary greater than the average salary of all employees, and order the results by name in ascending order.

```
select avg(salary)
from employees;  // getting 60700 from here

select *
from employees
where year(hire_date)= 2021 and salary>60700.0000
order by name asc;
```

THANK YOU
Aditya Gupta
2301010010