MI 1.02: Report #6

Due on

Nghiem Thi Phuong 5:30pm

Cao Anh Quan

Problem 1

1. Who have the same name as the managers of the Finance department?

```
SELECT *
FROM employees
WHERE employees.last_name IN (
    SELECT last_name
5   FROM
        employees
        JOIN dept_manager ON employees.emp_no = dept_manager.emp_no
        JOIN departments ON dept_manager.dept_no = departments.dept_no
    WHERE departments.dept_name = 'Finance'
10 );
```

	emp_no	birth_date	first_name	last_name	gender	hire_date
1	10210	1958-01-24	Yuping	Alpin	M	1994-05-10
2	10414	1954-04-09	Yinlin	Alpin	M	1990-05-30
3	11856	1962-12-18	Gao	Alpin	F	1989-01-14
4	12920	1964-05-06	Tetsushi	Legleitner	F	1988-10-01
5	13292	1962-04-04	Bokyung	Alpin	F	1995-05-17
6	13785	1961-03-08	Shietung	Legleitner	F	1997-06-04
7	14045	1953-06-28	Ymte	Alpin	M	1987-01-21
8	14813	1964-08-16	Naftali	Alpin	M	1985-10-21
9	15331	1953-08-16	Guther	Legleitner	F	1992-09-20

2. Who in the Production department were hired after the promotion of the last manager in that department?

```
SELECT *
FROM employees
    JOIN dept_emp ON employees.emp_no = dept_emp.emp_no
WHERE dept_emp.dept_no = (
5   SELECT dept_no
    FROM departments
    WHERE dept_name = 'Production'
) AND employees.hire_date >
        (SELECT MAX(from_date)
10              FROM dept_manager
            JOIN departments ON dept_manager.dept_no = departments.dept_no
                            WHERE dept_name = 'Production');
```

	employees.emp_no	birth_date	first_name	last_name	gender	hire_date	dept_emp.emp_no	dept_no	from_date	to_date
1	10024	1958-09-05	Suzette	Pettey	F	1997-05-19	10024	d004	1998-06-14	9999-01-01
2	10218	1958-12-07	Zhenhua	Magalhaes	M	1997-01-15	10218	d004	1997-01-31	9999-01-01
3	10267	1956-01-16	Shaunak	Cullers	M	1996-12-11	10267	d004	1997-04-26	9999-01-01
4	10284	1954-04-08	Masali	Murrill	F	1997-07-02	10284	d004	1999-07-06	9999-01-01
5	10298	1954-07-06	Dietrich	DuCasse	F	1999-03-30	10298	d004	2002-05-05	9999-01-01
6	10552	1953-03-25	Kazuhito	Shiratori	M	1998-08-18	10552	d004	1998-08-31	9999-01-01
7	10684	1956-01-23	Aimee	Tokunaga	F	1999-10-28	10684	d004	1999-10-28	9999-01-01
8	10811	1954-06-29	Ashish	Fortenbacher	M	1997-07-08	10811	d004	1997-07-08	9999-01-01
9	11075	1954-10-28	Karsten	Belinskaya	F	1996-10-29	11075	d004	1998-05-06	9999-01-01
10	11115	1958-06-27	Sahrah	Demos	M	1998-11-03	11115	d004	1999-01-13	9999-01-01
11	11209	1964-06-25	Xuejun	Penn	M	1997-09-06	11209	d004	1999-04-25	2000-02-08

3. Find the average salary of each department, from highest to lowest.

```
SELECT
    dept_no,
    AVG(salary) AS avg_salary
FROM
    (SELECT
        dept_no,
        salary
    FROM salaries
        JOIN dept_emp ON salaries.emp_no = dept_emp.emp_no) AS tmp
GROUP BY tmp.dept_no
ORDER BY avg_salary DESC;
```

	dept_no	avg_salary
1	d007	80667.6058
2	d001	71913.2000
3	d002	70489.3649
4	d008	59665.1817
5	d004	59605.4825
6	d005	59478.9012
7	d009	58770.3665
8	d006	57251.2719
9	d003	55574.8794

4. Find the average salary for each type of Engineer, from highest to lowest.

```
SELECT
    title,
    AVG(salary) as avg_salary
FROM
    (SELECT
        title,
        salary
    FROM salaries
        JOIN titles ON salaries.emp_no = titles.emp_no
    WHERE title LIKE '%Engineer%') AS tmp
GROUP BY title
ORDER BY avg_salary DESC;
```

	title	avg_salary
1	Senior Engineer	60543.2191
2	Engineer	59508.0397
3	Assistant Engineer	59304.9863