

MI 1.02: Report #6

Due on

Nghiem Thi Phuong 5:30pm

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Problem 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	Guthier	Legleitner	F	1992-09-20

- 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	Petty	F	1997-05-19	10024	0004	1998-06-14	9999-01-01
2	10218	1958-12-07	Zhenhua	Magalhaes	M	1997-01-15	10218	0004	1997-01-31	9999-01-01
3	10267	1956-01-16	Shaunak	Cullers	M	1996-12-11	10267	0004	1997-04-26	9999-01-01
4	10284	1954-04-08	Masali	Murrill	F	1997-07-02	10284	0004	1999-07-06	9999-01-01
5	10298	1954-07-06	Dietrich	DuCasse	F	1999-03-30	10298	0004	2002-05-05	9999-01-01
6	10552	1953-03-25	Kazuhiro	Shiratori	M	1990-08-18	10552	0004	1990-08-31	9999-01-01
7	10684	1956-01-23	Aimee	Tokunaga	F	1999-10-28	10684	0004	1999-10-28	9999-01-01
8	10811	1954-06-29	Ashish	Fortenbacher	M	1997-07-08	10811	0004	1997-07-08	9999-01-01
9	11075	1954-10-28	Karsten	Belinskaya	F	1996-10-29	11075	0004	1998-05-06	9999-01-01
10	11115	1958-06-27	Sahrah	Demos	M	1998-11-03	11115	0004	1999-01-13	9999-01-01
11	11209	1964-06-25	Xuejun	Penn	M	1997-09-06	11209	0004	1999-04-25	2000-02-08

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

```
SELECT
    dept_name,
    avg(average_salary) AS avg_salary
FROM dept_emp
5 JOIN
    (SELECT
        emp_no,
        avg(salary) AS average_salary
    FROM salaries
10 GROUP BY emp_no) AS t1
    ON dept_emp.emp_no = t1.emp_no
JOIN departments
    ON departments.dept_no = dept_emp.dept_no
GROUP BY departments.dept_no
15 ORDER BY avg_salary DESC;
```

	dept_name	avg_salary
1	Sales	78313.22247361
2	Marketing	69541.61771136
3	Finance	68061.43501801
4	Research	57322.03105659
5	Production	57253.31382027
6	Development	57152.20845497
7	Customer Service	56480.08591880
8	Quality Management	54892.93507273
9	Human Resources	53214.29085744

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

```
SELECT
    title,
    avg(average_salary) AS avg_salary
FROM
5 titles
JOIN
    (SELECT
        emp_no,
        avg(salary) AS average_salary
10 FROM salaries
    GROUP BY emp_no) AS t1
    ON titles.emp_no = t1.emp_no
WHERE title LIKE "%Engineer%"
GROUP BY title
15 ORDER BY avg_salary DESC;
```

	title	avg_salary
1	Senior Engineer	59144.76835191
2	Engineer	57244.45845623
3	Assistant Engineer	56963.53043254