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

```
SELECT * FROM employees
WHERE last_name IN
(
SELECT last_name
FROM employees,dept_manager,departments
WHERE
employees.emp_no = dept_manager.emp_no
AND
dept_manager.dept_no = departments.dept_no
AND
dept_name = 'Finance'
);
```

```
| 490322 | 1958-05-06 | Uri         | Legleitner | M | 1995-09-25 |
| 493063 | 1955-04-24 | Danil       | Alpin      | F | 1997-02-05 |
| 493266 | 1959-05-28 | Constantijn | Legleitner | M | 1986-05-25 |
| 493332 | 1958-12-20 | Anoosh      | Legleitner | M | 1988-11-10 |
| 493821 | 1963-06-03 | Aiichiro    | Legleitner | F | 1988-04-07 |
| 495608 | 1955-01-02 | Gift        | Legleitner | M | 1994-04-28 |
| 496062 | 1955-01-18 | Xinan       | Legleitner | M | 1994-05-02 |
| 497267 | 1956-05-24 | Gilbert     | Alpin      | F | 1990-07-21 |
| 497479 | 1960-09-03 | Ramalingam  | Alpin      | M | 1992-05-03 |
| 497947 | 1963-08-15 | Ekawit      | Alpin      | M | 1995-06-29 |
| 497954 | 1957-12-17 | Hilary      | Legleitner | M | 1991-08-07 |
| 498115 | 1957-10-11 | Geoffry     | Alpin      | M | 1985-10-01 |
| 498634 | 1964-02-17 | Heping      | Alpin      | M | 1987-12-14 |
| 499867 | 1962-01-25 | Hidde       | Alpin      | F | 1988-10-13 |
+--------+------------+-------------+-----------+-------+------------+
408 rows in set (0.61 sec)
```

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

```
SELECT CONCAT(first_name,' ',last_name),hire_date
FROM employees,dept_emp,departments
WHERE
employees.emp_no = dept_emp.emp_no
AND
dept_emp.dept_no = departments.dept_no
AND
dept_name='Production' AND hire_date >
(
SELECT MAX(from_date) FROM dept_manager,departments
```

```
WHERE
dept_manager.dept_no = departments.dept_no
AND
dept_name = 'Production'
);

| Aria Millington              | 1997-01-02 |
| Paddy Serdy                  | 1997-01-28 |
| Uzi Ravishankar              | 1998-02-03 |
| Shrikanth Luiz               | 1996-11-07 |
| Mohan England                | 1997-11-13 |
| Ziva Veevers                 | 1996-11-03 |
| Ortrun Delaune               | 1998-01-03 |
| Reuven Avouris               | 1997-02-03 |
| Arun Rajaraman               | 1997-09-07 |
| Yoshinari Theuretzbacher     | 1997-05-17 |
| Florina Cusworth             | 1997-05-18 |
| DeForest Mullainathan        | 1997-04-07 |
| Sachin Tsukuda               | 1997-11-30 |
+------------------------------+------------+
3758 rows in set (0.69 sec)
```

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

```
SELECT dept_no,AVG(Avg_Salary) AS Av_Salary FROM
(
SELECT salaries.emp_no,AVG(salary) AS Avg_Salary FROM salaries
JOIN
employees ON salaries.emp_no = employees.emp_no
GROUP BY salaries.emp_no
)AS temp_table
JOIN dept_emp on temp_table.emp_no=dept_emp.emp_no
GROUP BY dept_no
ORDER BY Av_Salary DESC;

+---------+----------------+
| dept_no | Av_Salary      |
+---------+----------------+
| d011    | 75852.69558780 |
| d002    | 68061.43501801 |
| d004    | 57253.31382027 |
| d010    | 57188.90672100 |
| d009    | 56480.08591880 |
| d006    | 54892.93507273 |
| d003    | 53214.29085744 |
```

```
+---------+----------------+
7 rows in set (4.85 sec)
```

4. Find the average salary of each job title, from highest to lowest

```
SELECT title,AVG(Avg_Salary) AS Av_Salary FROM
(
SELECT title,AVG(salary) AS Avg_Salary FROM titles
JOIN
employees ON titles.emp_no = employees.emp_no
JOIN
salaries ON employees.emp_no = salaries.emp_no
WHERE title LIKE '%Engineer%'
GROUP BY title
)AS temp_table
GROUP BY title
ORDER BY Av_Salary DESC;


+--------------------+----------------+
| title              | Av_Salary      |
+--------------------+----------------+
| Senior Engineer    | 60543.21910000 |
| Engineer           | 59508.03970000 |
| Assistant Engineer | 59304.98630000 |
+--------------------+----------------+
3 rows in set (12.18 sec)
```