

Lab work report 7 - View

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

```
create view last_name_manager as
    select last_name
    from employees
    join dept_manager
        on dept_manager.emp_no = employees.emp_no
    join departments
        on departments.dept_no = dept_manager.dept_no
    where dept_name = "Finance";
```

Query OK, 0 rows affected (0.02 sec)

```
select * from employees
where last_name in
(select last_name from last_name_manager);
```

| | | | | | | |
|------------|------------|-------------|--|------------|--|---|
| 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 (0.14 sec)

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

```
create view emp_no_production as
  select emp_no
  from departments
  join dept_emp
    on dept_emp.dept_no = departments.dept_no
  where dept_name = "Production";
```

Query OK, 0 rows affected (0.01 sec)

```
create view max_from_date as
  select max(from_date) as max_date from dept_manager
  where dept_no = (select dept_no from departments
  where dept_name = "Production");
```

Query OK, 0 rows affected (0.01 sec)

```
select * from employees
where emp_no in
(select emp_no from emp_no_production)
and
hire_date >= (select max_date from max_from_date)
order by hire_date desc;
```

| | | | |
|--------|------------|--------|----------|
| 63851 | 1957-07-20 | Mohit | Bergere |
| M | 1996-08-31 | | |
| 208806 | 1953-07-21 | Chinya | Naudin |
| M | 1996-08-31 | | |
| 275246 | 1958-10-09 | Hatem | Larfeldt |
| M | 1996-08-31 | | |
| 439670 | 1960-04-13 | Supot | Siegrist |
| F | 1996-08-31 | | |

| | | | | | | | | |
|-----------------------------|--------|--|------------|--|----------|--|----------------|--|
| | 240179 | | 1956-04-29 | | Fumitaka | | Pettit | |
| | F | | 1996-08-31 | | | | | |
| | 283373 | | 1964-11-03 | | Kellie | | Georgakopoulos | |
| | F | | 1996-08-31 | | | | | |
| | 262599 | | 1955-12-22 | | Maria | | Mullainathan | |
| | M | | 1996-08-31 | | | | | |
| | 255685 | | 1956-10-30 | | Dines | | Bahi | |
| | M | | 1996-08-31 | | | | | |
| | 484298 | | 1958-05-27 | | Henk | | Demke | |
| | F | | 1996-08-31 | | | | | |
| | 239704 | | 1952-08-01 | | Eldridge | | Bernatsky | |
| | M | | 1996-08-30 | | | | | |
| | 286545 | | 1954-06-25 | | Yuuichi | | Heiserman | |
| | F | | 1996-08-30 | | | | | |
| | 475381 | | 1958-06-08 | | Mokhtar | | Detkin | |
| | M | | 1996-08-30 | | | | | |
| | 41427 | | 1953-10-26 | | Ekawit | | Kusakabe | |
| | M | | 1996-08-30 | | | | | |
| | 418548 | | 1953-04-13 | | Pranay | | Molenkamp | |
| | M | | 1996-08-30 | | | | | |
| | 233057 | | 1962-10-01 | | Sibyl | | Molenaar | |
| | M | | 1996-08-30 | | | | | |
| +-----+-----+-----+-----+ | | | | | | | | |
| 3764 rows in set (0.21 sec) | | | | | | | | |

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

```
create view avg_salary as
    select emp_no, avg(salary) as average_salary
    from salaries
    group by emp_no;
```

Query OK, 0 rows affected (0.01 sec)

```
select dept_name, avg(average_salary) as avg_salary
from dept_emp join
avg_salary
on dept_emp.emp_no = avg_salary.emp_no
join departments
on departments.dept_no = dept_emp.dept_no
```

```
group by departments.dept_no
order by avg_salary desc;
```

| dept_name | avg_salary |
|--------------------------|----------------|
| Marketing and Sales | 75852.69558780 |
| Finance | 68061.43501801 |
| Production | 57253.31382027 |
| Research and Development | 57188.90672100 |
| Customer Service | 56480.08591880 |
| Quality Management | 54892.93507273 |
| Human Resources | 53214.29085744 |

7 rows in set (1.20 sec)

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

```
create view average_salary as
    select emp_no, avg(salary) as average_salary
    from salaries
    group by emp_no;
Query OK, 0 rows affected (0.01 sec)
```

```
select title , avg(average_salary) as avg_salary from
titles join
average_salary
on titles.emp_no = average_salary.emp_no
where title like "%Engineer%"
group by title
order by avg_salary desc;
```

| title | avg_salary |
|--------------------|----------------|
| Senior Engineer | 59144.76835191 |
| Engineer | 57244.45845623 |
| Assistant Engineer | 56963.53043254 |

3 rows in set (1.30 sec)