Report.7.View

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

```
create view ManagerLastName as
select last_name from employees
join dept_manager on employees.emp_no = dept_manager.emp_no
join departments on departments.dept_no=dept_manager.dept_no
and dept_name='Finance';

select distinct employees.emp_no,concat(first_name,'␣',last_name)
as fullname
from employees join dept_emp on employees.emp_no=dept_emp.emp_no
          join departments on departments.dept_no=dept_emp.dept_no
where last_name in (select * from ManagerLastName);
```

```
|  487848 | Arvind Alpin             |
|  488517 | Shaw Alpin               |
|  488519 | Qiwen Alpin              |
|  488676 | Kristine Alpin           |
|  489813 | Conrado Alpin            |
|  490322 | Uri Legleitner           |
|  493063 | Danil Alpin              |
|  493266 | Constantijn Legleitner   |
|  493332 | Anoosh Legleitner        |
|  493821 | Aiichiro Legleitner      |
|  495608 | Gift Legleitner          |
|  496062 | Xinan Legleitner         |
|  497267 | Gilbert Alpin            |
|  497479 | Ramalingam Alpin         |
|  497947 | Ekawit Alpin             |
|  497954 | Hilary Legleitner        |
|  498115 | Geoffry Alpin            |
|  498634 | Heping Alpin             |
|  499867 | Hidde Alpin              |
+---------+--------------------------+
408 rows in set (0.16 sec)
```

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

```sql
create view ManagerPromotion as
select from_date from dept_manager
where dept_no = (select dept_no
        from departments where dept_name='Production')
order by from_date desc limit 0,1;

select employees.emp_no,concat(first_name,'_',last_name)
as fullname
from employees
join dept_emp on employees.emp_no=dept_emp.emp_no
join departments on departments.dept_no=dept_emp.dept_no
and dept_name='Production'
where from_date > ( select * from ManagerPromotion);
```

```
| 499811 | Danae Sevcikova           |
| 499833 | Shirish Rettelbach        |
| 499855 | Constantine Michaels      |
| 499856 | Yoshinari Theuretzbacher  |
| 499864 | Teiji Tsukuda             |
| 499874 | Dharmaraja Range          |
| 499913 | Masako Heiserman          |
| 499916 | Florina Cusworth          |
| 499918 | Hilary Rodiger            |
| 499923 | Sergi Melton              |
| 499925 | Tuval Hardjono            |
| 499948 | Cordelia Paludetto        |
| 499971 | Uwe Uludag                |
| 499974 | Shuichi Piazza            |
| 499983 | Uri Juneja                |
| 499993 | DeForest Mullainathan     |
| 499995 | Dekang Lichtner           |
| 499999 | Sachin Tsukuda            |
+--------+---------------------------+
19513 rows in set (0.14 sec)
```

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

create view AvgSalary **as**
select dept_emp.dept_no, dept_name, **avg**(salary) **as** average
from salaries
join employees **on** employees.emp_no=salaries.emp_no
join dept_emp **on** dept_emp.emp_no = employees.emp_no
join departments **on** dept_emp.dept_no = departments.dept_no
group by dept_emp.dept_no ;

select dept_name, average **from** AvgSalary
order by average **desc**;

```
mysql> select dept_name, average from
    -> ( select dept_emp.dept_no, dept_name, avg(salary) as average
    -> from salaries join employees on employees.emp_no=salaries.emp_no
    -> join dept_emp on dept_emp.emp_no = employees.emp_no
    -> join departments on dept_emp.dept_no = departments.dept_no
    -> group by dept_emp.dept_no ) as average1
    -> order by average desc;
+--------------------+------------+
| dept_name          | average    |
+--------------------+------------+
| Sales              | 80667.6058 |
| Marketing          | 71913.2000 |
| Finance            | 70489.3649 |
| Research           | 59665.1817 |
| Production         | 59605.4825 |
| Development        | 59478.9012 |
| Customer Service   | 58770.3665 |
| Quality Management | 57251.2719 |
| Human Resources    | 55574.8794 |
+--------------------+------------+
9 rows in set (13.63 sec)
```

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

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

select title, avg(avgsalary) as averagesalary
from AvgSal join titles on AvgSal.emp_no=titles.emp_no
and title like '%Engineer%'
group by title
order by averagesalary desc;
```

```
mysql> select title, avg(avgsalary) as averagesalary
    -> from
    -> (select emp_no,avg(salary) as avgsalary
    -> from salaries group by emp_no) as average
    -> join titles on average.emp_no=titles.emp_no
    -> and title like '%Engineer%'
    -> group by title
    -> order by averagesalary desc;
+--------------------+----------------+
| title              | averagesalary  |
+--------------------+----------------+
| Senior Engineer    | 59144.76835191 |
| Engineer           | 57244.45845623 |
| Assistant Engineer | 56963.53043254 |
+--------------------+----------------+
3 rows in set (2.19 sec)
```