

a) Tulosta kymmenen aakkosjärjestyksessä ensimmäisen työntekijän tiedot sukunimen mukaan lajiteltuna. Vihje: LIMIT rajoittaa tulostettavien tietojen määrän.

mysql> SELECT * FROM employees ORDER BY last_name LIMIT 10;

```
mysql> SELECT * FROM employees ORDER BY last_name LIMIT 10;
```

emp_no	birth_date	first_name	last_name	gender	hire_date
11761	1964-07-17	Bartek	Aamodt	M	1991-06-12
15427	1959-03-06	Aluzio	Aamodt	M	1985-03-03
18182	1963-02-23	Dekang	Aamodt	F	1988-05-25
16572	1956-11-26	Matt	Aamodt	M	1987-06-16
12791	1960-06-16	Mokhtar	Aamodt	M	1994-08-14
12516	1958-06-25	Sreenivas	Aamodt	F	1990-03-06
12982	1952-12-08	Sachem	Aamodt	F	1992-01-11
17400	1962-03-22	Basim	Aamodt	F	1991-09-15
19898	1957-03-09	Vidar	Aamodt	M	1988-08-06
17885	1954-02-01	Takanari	Aamodt	M	1996-08-19

10 rows in set (0.07 sec)

b) Sama kuten edellä, mutta sukunimen JA etunimen mukaan lajiteltuna.

mysql> SELECT *FROM employees ORDER BY last_name, first_name LIMIT 10;

```
mysql> SELECT *FROM employees ORDER BY last_name, first_name LIMIT 10;
```

emp_no	birth_date	first_name	last_name	gender	hire_date
258641	1961-05-23	Abdelkader	Aamodt	M	1994-12-02
258005	1953-02-17	Adhemar	Aamodt	F	1991-01-21
455773	1960-05-04	Aemilian	Aamodt	M	1988-04-21
436560	1959-03-16	Alagu	Aamodt	F	1991-10-17
266651	1959-05-28	Aleksander	Aamodt	F	1989-03-29
487598	1962-03-03	Alexius	Aamodt	M	1994-12-30
216963	1960-07-16	Alois	Aamodt	M	1995-08-24
15427	1959-03-06	Aluzio	Aamodt	M	1985-03-03
100860	1964-06-20	Amabile	Aamodt	F	1993-02-06
107070	1954-04-24	Anestis	Aamodt	M	1990-10-30

10 rows in set (0.08 sec)

c) Tulosta viiden viimeksi palkatun työntekijän tiedot.

```
mysql> SELECT * FROM employees ORDER BY hire_date DESC LIMIT 5;
```

```
mysql> SELECT * FROM employees ORDER BY hire_date DESC LIMIT 5;
```

emp_no	birth_date	first_name	last_name	gender	hire_date
463807	1964-06-12	Bikash	Covnot	M	2000-01-28
428377	1957-05-09	Yucai	Gerlach	M	2000-01-23
499553	1954-05-06	Hideyuki	Delgrande	F	2000-01-22
222965	1959-08-07	Volkmar	Perko	F	2000-01-13
47291	1960-09-09	Ulf	Flexer	M	2000-01-12

5 rows in set (0.07 sec)

d) Kenellä on suurin palkka ? Tulosta etunimi, sukunimi ja palkka.

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no ORDER BY salaries.salary DESC LIMIT 1;
```

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no ORDER BY salaries.salary DESC LIMIT 1;
```

first_name	last_name	salary
Tokuyasu	Pesch	158220

1 row in set (0.94 sec)

e) Kenellä on pienin palkka ? Tulosta etunimi, sukunimi ja palkka.

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no ORDER BY salaries.salary LIMIT 1;
```

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no ORDER BY salaries.salary LIMIT 1;
```

first_name	last_name	salary
Olivera	Baek	38623

1 row in set (0.94 sec)

f) Tulosta työntekijät (etunimi, sukunimi, palkka), jotka ansaitsevat yli 150000.

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no WHERE salaries.salary > 150000;
```

```
mysql> SELECT employees.first_name, employees.last_name, salaries.salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no WHERE salaries.salary > 150000;
```

first_name	last_name	salary
Tokuyasu	Pesch	151115
Tokuyasu	Pesch	153166
Tokuyasu	Pesch	153458
Tokuyasu	Pesch	157821
Tokuyasu	Pesch	158220
Ibibia	Junet	150345
Xiahua	Whitcomb	151929
Xiahua	Whitcomb	155709

g) Kuinka monta työntekijää työskentelee myynnissä (Sales)?

```
mysql> SELECT COUNT(*) as sales_count FROM employees JOIN dept_emp ON  
employees.emp_no = dept_emp.emp_no JOIN departments ON dept_emp.dept_no =  
departments.dept_no WHERE departments.dept_name = 'Sales';
```

```
mysql> SELECT COUNT(*) as sales_count  
-> FROM employees  
-> JOIN dept_emp ON employees.emp_no = dept_emp.emp_no  
-> JOIN departments ON dept_emp.dept_no = departments.dept_no  
-> WHERE departments.dept_name = 'Sales';  
+-----+  
| sales_count |  
+-----+  
|          52245 |  
+-----+  
1 row in set (0.11 sec)
```

Entä markkinoinnissa (Marketing) ?

```
mysql> SELECT COUNT(*) as marketing_count FROM employees JOIN dept_emp ON  
employees.emp_no = dept_emp.emp_no JOIN departments ON dept_emp.dept_no =  
departments.dept_no WHERE departments.dept_name = 'Marketing';
```

```
mysql> SELECT COUNT(*) as marketing_count FROM employees JOIN dept_emp ON employees.emp_no = dept_emp.emp_no JOIN dep  
artments ON dept_emp.dept_no = departments.dept_no WHERE departments.dept_name = 'Marketing';  
+-----+  
| marketing_count |  
+-----+  
|          20211 |  
+-----+  
1 row in set (0.07 sec)
```

h) Tulosta kaikkien osastonjohtajien (Department Managers) etunimi, sukunimi ja osasto, jolla työskentelee.

```
mysql> SELECT employees.first_name, employees.last_name, departments.dept_name  
as department FROM employees JOIN dept_manager ON employees.emp_no =  
dept_manager.emp_no JOIN departments ON dept_manager.dept_no =  
departments.dept_no;
```

```
mysql> SELECT employees.first_name, employees.last_name, departments.dept_name as department FROM employees JOIN dept  
_manager ON employees.emp_no = dept_manager.emp_no JOIN departments ON dept_manager.dept_no = departments.dept_no;  
+-----+ +-----+ +-----+  
| first_name | | last_name | | department |  
+-----+ +-----+ +-----+  
| Tony | | Butterworth | | Customer Service |  
| Marjo | | Giarratana | | Customer Service |  
| Xiaobin | | Spinelli | | Customer Service |  
| Yuchang | | Weedman | | Customer Service |  
| DeForest | | Hagimont | | Development |  
| Leon | | DasSarma | | Development |  
| Ebru | | Alpin | | Finance |  
| Isamu | | Legleitner | | Finance |  
| Shirish | | Ossenbruggen | | Human Resources |  
| Karsten | | Sigstam | | Human Resources |  
| Margareta | | Markovitch | | Marketing |
```

i) Mikä on myynnissä työskentelevien keskipalkka ? Entä markkinoinnissa ?

```
mysql> SELECT AVG(salaries.salary) as average_sales_salary FROM salaries JOIN  
dept_emp ON salaries.emp_no = dept_emp.emp_no JOIN departments ON  
dept_emp.dept_no = departments.dept_no WHERE departments.dept_name = 'Sales';
```

```
mysql> SELECT AVG(salaries.salary) as average_sales_salary FROM salaries JOIN dept_emp ON salaries.emp_no = dept_emp.  
emp_no JOIN departments ON dept_emp.dept_no = departments.dept_no WHERE departments.dept_name = 'Sales';  
+-----+  
| average_sales_salary |  
+-----+  
|          80667.6058 |  
+-----+  
1 row in set (0.28 sec)
```