

```
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 (0.40 sec)

mysql>
```

a) Järjestys sukunimen mukaan

```
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 (0.48 sec)

mysql>
```

b) Järjestys suku- ja etunimen mukaan

```
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 (0.19 sec)

mysql>
```

c) Viimeksi palkattua työntekijää

```
mysql> select * from employees join salaries on employees.emp_no=salaries.emp_no where salary=(select max(salary) from salaries)
-> ;
```

emp_no	birth_date	first_name	last_name	gender	hire_date	emp_no	salary	from_date	to_date
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	158220	2002-03-22	9999-01-01

```
1 row in set (2.28 sec)

mysql>
```

d) Työntekijä jolla suurin palkka

```
mysql> select * from employees join salaries on employees.emp_no=salaries.emp_no where salary=(select min(salary) from salaries);
```

emp_no	birth_date	first_name	last_name	gender	hire_date	emp_no	salary	from_date	to_date
253406	1953-09-23	Olivera	Baek	M	1994-07-04	253406	38623	2002-02-20	9999-01-01

```
1 row in set (2.42 sec)

mysql>
```

e) Työntekijä jolla pienin palkka

```
mysql> select * from employees join salaries on employees.emp_no=salaries.emp_no where salary>150000;
```

emp_no	birth_date	first_name	last_name	gender	hire_date	emp_no	salary	from_date	to_date
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	151115	1998-03-23	1999-03-23
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	153166	1999-03-23	2000-03-22
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	153458	2000-03-22	2001-03-22
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	157821	2001-03-22	2002-03-22
43624	1953-11-14	Tokuyasu	Pesch	M	1985-03-26	43624	158220	2002-03-22	9999-01-01
46439	1953-01-31	Ibibia	Junet	M	1985-05-20	46439	150345	2002-05-15	9999-01-01
47978	1956-03-24	Xiahua	Whitcomb	M	1985-07-18	47978	151929	2001-07-14	2002-07-14
47978	1956-03-24	Xiahua	Whitcomb	M	1985-07-18	47978	155709	2002-07-14	9999-01-01
66793	1964-05-15	Lansing	Kambil	M	1985-06-20	66793	150052	2002-06-16	9999-01-01
80823	1963-01-21	Willard	Baca	M	1985-02-26	80823	151768	2001-02-22	2002-02-22
80823	1963-01-21	Willard	Baca	M	1985-02-26	80823	154459	2002-02-22	9999-01-01
109334	1955-08-02	Tsutomu	Alameldin	M	1985-02-15	109334	151484	1998-02-12	1999-02-12
109334	1955-08-02	Tsutomu	Alameldin	M	1985-02-15	109334	154885	1999-02-12	2000-02-12
109334	1955-08-02	Tsutomu	Alameldin	M	1985-02-15	109334	155377	2000-02-12	2001-02-11
109334	1955-08-02	Tsutomu	Alameldin	M	1985-02-15	109334	154888	2001-02-11	2002-02-11
109334	1955-08-02	Tsutomu	Alameldin	M	1985-02-15	109334	155190	2002-02-11	9999-01-01
205000	1956-01-24	Charmane	Griswold	M	1990-06-23	205000	151596	2000-10-09	2001-10-09
205000	1956-01-24	Charmane	Griswold	M	1990-06-23	205000	153715	2001-10-09	9999-01-01
237542	1954-10-05	Weicheng	Hatcliff	F	1985-04-12	237542	150994	2001-04-08	2002-04-08
237542	1954-10-05	Weicheng	Hatcliff	F	1985-04-12	237542	152687	2002-04-08	9999-01-01
238117	1959-06-21	Mitsuyuki	Stanfel	M	1988-01-03	238117	152220	2001-12-30	9999-01-01
253939	1957-12-03	Sanjai	Luders	M	1987-04-15	253939	150378	2000-04-11	2001-04-11
253939	1957-12-03	Sanjai	Luders	M	1987-04-15	253939	154227	2001-04-11	2002-04-11
253939	1957-12-03	Sanjai	Luders	M	1987-04-15	253939	155513	2002-04-11	9999-01-01
254466	1963-05-27	Honesty	Mukaidono	M	1986-08-08	254466	150754	1999-08-05	2000-08-04
254466	1963-05-27	Honesty	Mukaidono	M	1986-08-08	254466	152576	2000-08-04	2001-08-04
254466	1963-05-27	Honesty	Mukaidono	M	1986-08-08	254466	156286	2001-08-04	9999-01-01
266526	1957-02-14	Weiying	Chenoweth	F	1986-10-08	266526	151080	2000-10-04	2001-10-04
266526	1957-02-14	Weiying	Chenoweth	F	1986-10-08	266526	152710	2001-10-04	9999-01-01
276633	1954-01-27	Shin	Birdsall	M	1987-10-08	276633	150467	2000-10-04	2001-10-04
276633	1954-01-27	Shin	Birdsall	M	1987-10-08	276633	152412	2001-10-04	9999-01-01
279776	1955-05-06	Mohammed	Moehrke	M	1986-06-10	279776	150740	2002-06-06	9999-01-01
493158	1961-05-20	Lidong	Meriste	M	1987-05-09	493158	150993	1999-05-06	2000-05-05
493158	1961-05-20	Lidong	Meriste	M	1987-05-09	493158	151565	2000-05-05	2001-05-05
493158	1961-05-20	Lidong	Meriste	M	1987-05-09	493158	152208	2001-05-05	2002-05-05
493158	1961-05-20	Lidong	Meriste	M	1987-05-09	493158	154376	2002-05-05	9999-01-01

```
36 rows in set (2.77 sec)

mysql>
```

f)Työntekijät joiden palkka yli 150 000

```
mysql> Select dept_name, count(*) as Lukumaara from departments join dept_emp on departments.dept_no=
-> dept_emp.dept_no join employees on employees.emp_no=dept_emp.emp_no where dept_name='Sales';
```

dept_name	Lukumaara
Sales	52245

```
1 row in set (0.85 sec)

mysql>
```

```
mysql> Select dept_name, count(*) as Lukumaara from departments join dept_emp on departments.dept_no=
-> dept_emp.dept_no join employees on employees.emp_no=dept_emp.emp_no where dept_name='Marketing';
```

dept_name	Lukumaara
Marketing	20211

```
1 row in set (0.38 sec)

mysql>
```

g)Työntekijöiden määrä myynnissä ja markkinoinnissa

```
mysql> select employees.first_name, employees.last_name, departments.dept_name from dept_manager
-> join employees on dept_manager.emp_no=employees.emp_no
-> join departments on dept_manager.dept_no=departments.dept_no;
```

first_name	last_name	dept_name
Tonny	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
Vishwani	Minakawa	Marketing
Krassimir	Wegerle	Production
Rosine	Cools	Production
Shem	Kieras	Production
Oscar	Ghazalie	Production
Peternela	Onuegbé	Quality Management
Rutger	Hofmeyr	Quality Management
Sanjoy	Quadeer	Quality Management
Dung	Pesch	Quality Management
Arie	Staelin	Research
Hilary	Kambil	Research
Przemyslaw	Kaelbling	Sales
Hauke	Zhang	Sales

```
24 rows in set (0.00 sec)

mysql>
```

h) Osastojen nimet ja niiden johtajat

```
mysql> select AVG(salaries.salary) from salaries
-> join employees on salaries.emp_no=employees.emp_no
-> join dept_emp on employees.emp_no=dept_emp.emp_no
-> join departments on dept_emp.dept_no=departments.dept_no where dept_name='Sales';
```

AVG(salaries.salary)
80667.6058

```
1 row in set (1.47 sec)

mysql>
```

```
mysql> select AVG(salaries.salary) from salaries
-> join employees on salaries.emp_no=employees.emp_no
-> join dept_emp on employees.emp_no=dept_emp.emp_no
-> join departments on dept_emp.dept_no=departments.dept_no where dept_name='Marketing';
```

AVG(salaries.salary)
71913.2000

```
1 row in set (1.36 sec)

mysql>
```

i) Mynnessä ja markinoinnissa työskentelevien keskipalkat