

tehtävä 7

a)

```
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 (0.89 sec)

b)

```
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 (0.70 sec)

c)

```
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 (0.43 sec)

d)

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

| first_name | last_name | salary |
|------------|-----------|--------|
| Tokuyasu | Pesch | 158220 |

1 row in set (2.49 sec)

e)

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

| first_name | last_name | salary |
|------------|-----------|--------|
| Olivera | Baek | 38623 |

```
1 row in set (2.76 sec)
```

f)

```
mysql> SELECT DISTINCT first_name, last_name, salary FROM employees JOIN salaries ON employees.emp_no = salaries.emp_no WHERE salary > 150000 AND to_date = '9999-01-01';
```

| first_name | last_name | salary |
|------------|------------|--------|
| Tokuyasu | Pesch | 158220 |
| Ibibia | Junet | 150345 |
| Xiahua | Whitcomb | 155709 |
| Lansing | Kambil | 150052 |
| Willard | Baca | 154459 |
| Tsutomu | Alameludin | 155190 |
| Charmane | Griswold | 153715 |
| Weicheng | Hatcliff | 152687 |
| Mitsuyuki | Stanfel | 152220 |
| Sanjai | Luders | 155513 |
| Honesty | Mukaidono | 156286 |
| Weijing | Chenoweth | 152710 |
| Shin | Birdsall | 152412 |
| Mohammed | Moehrke | 150740 |
| Lidong | Meriste | 154376 |

```
15 rows in set (1.42 sec)
```

g)

```
mysql> SELECT COUNT(*) FROM departments JOIN current_dept_emp ON departments.dept_no = current_dept_emp.dept_no WHERE dept_name = 'sales';
```

| COUNT(*) |
|----------|
| 46922 |

```
1 row in set (1.22 sec)
```

```
mysql> SELECT COUNT(*) FROM departments JOIN current_dept_emp ON departments.dept_no = current_dept_emp.dept_no WHERE dept_name = 'marketing';
```

| COUNT(*) |
|----------|
| 18426 |

```
1 row in set (1.50 sec)
```

h)

```
mysql> SELECT first_name, last_name, dept_name 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 | 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  | Onuegbe     | 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)
```

i)

```
mysql> SELECT AVG(salary) FROM salaries JOIN employees ON salaries.emp_no = employees.emp_no JOIN dept_manager ON employees.emp_no = dept_manager.emp_no
JOIN departments ON dept_manager.dept_no = departments.dept_no WHERE dept_name = 'sales';
+-----+
| AVG(salary) |
+-----+
| 85738.7647 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT AVG(salary) FROM salaries JOIN employees ON salaries.emp_no = employees.emp_no JOIN dept_manager ON employees.emp_no = dept_manager.emp_no
JOIN departments ON dept_manager.dept_no = departments.dept_no WHERE dept_name = 'marketing';
+-----+
| AVG(salary) |
+-----+
| 88371.6857 |
+-----+
1 row in set (0.00 sec)
```