

SQL Homework – Employee Database

List the following details of each employee: employee number, last name, first name, sex, and salary.

```
SELECT
    e.emp_no, e.last_name, e.first_name, e.sex, s.salary
FROM
    employees e
JOIN salaries s ON e.emp_no=s.emp_no
```

	emp_no integer	last_name character varying (20)	first_name character varying (20)	sex character varying (1)	salary integer
1	10005	Maliniak	Kyoichi	M	78228
2	10010	Piveteau	Duangkaew	F	72488
3	10011	Sluis	Mary	F	42365
4	10013	Terkki	Eberhardt	M	40000
5	10017	Bouloucos	Cristinel	F	71380
6	10035	Chappelet	Alain	M	41538
7	10037	Makrucki	Pradeep	M	40000
8	10045	Shanbhogue	Moss	M	41971
9	10051	Caine	Hidefumi	M	48817
10	10058	McFarlin	Berhard	M	52787
11	10078	Mondadori	Danel	F	47280

List first name, last name, and hire date for employees who were hired in 1986.

```
SELECT
    e.first_name,e.last_name,e.hire_date
FROM
    employees e
WHERE
    e.hire_date >= '1986-1-1' AND e.hire_date <= '1986-12-31'
ORDER BY
    e.hire_date
```

	first_name character varying (20)	last_name character varying (20)	hire_date date
1	Mario	Schrift	1986-01-01
2	Subir	Shumilov	1986-01-01
3	Jaihie	Soicher	1986-01-01
4	Mario	Orlowska	1986-01-01
5	Unal	Cooley	1986-01-01
6	Sungwon	Range	1986-01-01
7	Stein	Thiran	1986-01-01
8	Abdelkader	Marrakchi	1986-01-01
9	Jiang	Bierbaum	1986-01-01
10	Basil	Matteis	1986-01-01

List the manager of each department with the following information: department number, department name, the manager's employee number, last name, first name.

```

SELECT
    d.dept_no, d.dep_name, dm.emp_no, e.last_name, e.first_name
FROM
    dept_manager dm
    JOIN departments d on dm.dept_no=d.dept_no
    JOIN employees e on dm.emp_no=e.emp_no

```

	dept_no character varying (5)	dep_name character varying (30)	emp_no integer	last_name character varying (20)	first_name character varying (20)
1	d001	Marketing	110022	Markovitch	Margareta
2	d001	Marketing	110039	Minakawa	Vishwani
3	d002	Finance	110085	Alpin	Ebru
4	d002	Finance	110114	Legleitner	Isamu
5	d003	Human Resources	110183	Ossenbruggen	Shirish
6	d003	Human Resources	110228	Sigstam	Karsten
7	d004	Production	110303	Wegerle	Krassimir
8	d004	Production	110344	Cools	Rosine
9	d004	Production	110386	Kieras	Shem
10	d004	Production	110420	Ghazalle	Oscar
11	d005	Development	110511	Hagimont	DeForest

List the department of each employee with the following information: employee number, last name, first name, and department name.

```

SELECT
    d.dept_no,d.dep_name,dm.emp_no,e.last_name,e.first_name
FROM
    dept_manager dm
    JOIN departments d on dm.dept_no=d.dept_no
    JOIN employees e on dm.emp_no=e.emp_no

```

	emp_no integer	last_name character varying (20)	first_name character varying (20)	dep_name character varying (30)
1	10005	Maliniak	Kyoichi	Human Resources
2	10010	Piveteau	Duangkaew	Production
3	10010	Piveteau	Duangkaew	Quality Management
4	10011	Sluis	Mary	Customer Service
5	10013	Terkki	Eberhardt	Human Resources
6	10017	Bouloucos	Cristinel	Marketing
7	10035	Chappelet	Alain	Production
8	10037	Makrucki	Pradeep	Development

List first name, last name, and sex for employees whose first name is "Hercules" and last names begin with "B."

```
SELECT
    e.first_name, e.last_name, e.sex
FROM
    employees e
WHERE
    e.first_name = 'Hercules'
    AND e.last_name like 'B%'
```

	first_name character varying (20)	last_name character varying (20)	sex character varying (1)
1	Hercules	Baer	M
2	Hercules	Biron	F
3	Hercules	Birge	F
4	Hercules	Berstel	F
5	Hercules	Bernatsky	M
6	Hercules	Bail	F
7	Hercules	Bodoff	M
8	Hercules	Benantar	F
9	Hercules	Basagni	M
10	Hercules	Bernardinello	F
11	Hercules	Baranowski	M

List all employees in the Sales department, including their employee number, last name, first name, and department name.

```
SELECT
    e.emp_no, e.last_name, e.first_name, d.dep_name
FROM
    employees e
    JOIN dept_emp de on e.emp_no=de.emp_no
    JOIN departments d on de.dept_no=d.dept_no
WHERE
    d.dep_name = 'Sales'
```

	emp_no integer	last_name character varying (20)	first_name character varying (20)	dep_name character varying (30)
9	10068	Brattka	Charlene	Sales
10	10087	Eugenio	Xinglin	Sales
11	10088	Syrzycki	Jungsoon	Sales
12	10089	Flasterstein	Sudharsan	Sales
13	10093	Desikan	Sailaja	Sales
14	10095	Morton	Hilari	Sales
15	10099	Sullins	Valter	Sales
16	10101	Heyers	Perla	Sales

List all employees in the Sales and Development departments, including their employee number, last name, first name, and department name.

```

SELECT
    e.emp_no, e.last_name, e.first_name, d.dep_name
FROM
    employees e
    JOIN dept_emp de on e.emp_no=de.emp_no
    JOIN departments d on de.dept_no=d.dept_no
WHERE
    d.dep_name = 'Sales'
    OR d.dep_name = 'Development'
ORDER BY
    d.dep_name,e.last_name

```

	emp_no integer	last_name character varying (20)	first_name character varying (20)	dep_name character varying (30)
1	15427	Aamodt	Aluzio	Development
2	236802	Aamodt	Yoshimitsu	Development
3	36577	Aamodt	Mahmut	Development
4	84904	Aamodt	Gladys	Development
5	57989	Aamodt	Takahira	Development
6	16572	Aamodt	Matt	Development
7	12982	Aamodt	Sachem	Development

In descending order, list the frequency count of employee last names, i.e., how many employees share each last name.

```

SELECT
    e.last_name, COUNT(e.last_name) as count
FROM
    employees e
GROUP BY
    e.last_name
ORDER BY
    count DESC

```

	last_name character varying (20)	count bigint
1	Baba	226
2	Gelosh	223
3	Coorg	223
4	Farris	222
5	Sudbeck	222
6	Adachi	221
7	Osgood	220
8	Mandell	218
9	Masada	218