






1. List the employee number, last name, first name, sex, and salary of each employee.

```
SELECT
    employees.emp_no
AS
    employee_number,
    employees.last_name,
    employees.first_name,
    employees.sex,
    salaries.salary
FROM
    employees
JOIN
    salaries
ON
    employees.emp_no = salaries.emp_no
ORDER BY
    employee_number
LIMIT (5);
```

	employee_number  integer	last_name  character varying (30)	first_name  character varying (30)	sex  character varying (1)	salary  integer
1	10001	Facello	Georgi	M	60117
2	10002	Simmel	Bezalel	F	65828
3	10003	Bamford	Parto	M	40006
4	10004	Koblick	Chirstian	M	40054
5	10005	Maliniak	Kyoichi	M	78228

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

```
SELECT
    *
FROM
    employees
WHERE
    DATE_PART('year',hire_date) = 1986
ORDER BY emp_no
```

LIMIT 5;

	emp_no [PK] integer	emp_title_id [PK] character varying (5)	birth_date date	first_name character varying (30)	last_name character varying (30)	sex character varying (1)	hire_date date
1	10001	e0003	1953-09-02	Georgi	Facello	M	1986-06-26
2	10003	e0003	1959-12-03	Parto	Bamford	M	1986-08-28
3	10004	e0003	1954-05-01	Chirstian	Koblick	M	1986-12-01
4	10053	s0002	1954-09-13	Sanjiv	Zschoche	F	1986-02-04
5	10066	e0003	1952-11-13	Kwee	Schusler	M	1986-02-26

3. List the manager of each department along with their department number, department name, employee number, last name, and first name.

```
SELECT
    managers.dept_no,
    departments.dept_name,
    managers.emp_no,
    employees.last_name,
    employees.first_name
FROM
    managers
JOIN
    employees
ON
    managers.emp_no = employees.emp_no
JOIN
    departments
ON
    managers.dept_no = departments.dept_no
LIMIT (5);
```

	dept_no character varying (5)	dept_name character varying (50)	emp_no integer	last_name character varying (30)	first_name character varying (30)
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

4. List the department number for each employee along with that employee's employee number, last name, first name, and department name.

```

SELECT
    employees.emp_no,
    employees.last_name,
    employees.first_name,
    departments.dept_name
FROM
    employees
JOIN
    departments_employees
ON
    employees.emp_no = departments_employees.emp_no
JOIN
    departments
ON
    departments_employees.dept_no = departments.dept_no
LIMIT (5);

```

	emp_no integer 🔒	last_name character varying (30) 🔒	first_name character varying (30) 🔒	dept_name character varying (50) 🔒
1	10001	Facello	Georgi	Development
2	10002	Simmel	Bezalel	Sales
3	10003	Bamford	Parto	Production
4	10004	Koblick	Chirstian	Production
5	10005	Maliniak	Kyoichi	Human Resources

- List first name, last name, and sex of each employee whose first name is Hercules and whose last name begins with the letter B.

```

SELECT
    employees.first_name,
    employees.last_name,
    employees.sex
FROM
    employees
WHERE
    first_name = 'Hercules' AND last_name LIKE 'B%'
LIMIT (5);

```

	first_name character varying (30) 🔒	last_name character varying (30) 🔒	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. List each employee in the Sales department, including their employee number, last name, and first name.

```

SELECT
    employees.emp_no,
    employees.last_name,
    employees.first_name,
    departments.dept_name
FROM
    employees
JOIN
    departments_employees
ON
    employees.emp_no = departments_employees.emp_no
JOIN
    departments
ON
    departments_employees.dept_no = departments.dept_no
WHERE
    departments.dept_name = 'Sales'
LIMIT (5);

```

	emp_no integer	last_name character varying (30)	first_name character varying (30)	dept_name character varying (50)
1	10002	Simmel	Bezalel	Sales
2	10016	Cappelletti	Kazuhito	Sales
3	10034	Swan	Bader	Sales
4	10041	Lenart	Uri	Sales
5	10050	Dredge	Yinghua	Sales

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

```



SELECT
    employees.emp_no,
    employees.last_name,
    employees.first_name,
    departments.dept_name
FROM
    employees
JOIN
    departments_employees
ON
    employees.emp_no = departments_employees.emp_no
JOIN
    departments
ON
    departments_employees.dept_no = departments.dept_no
WHERE
    departments.dept_name = 'Sales' OR departments.dept_name = 'Development'
LIMIT (5);

```

	emp_no integer	last_name character varying (30)	first_name character varying (30)	dept_name character varying (50)
1	10001	Facello	Georgi	Development
2	10002	Simmel	Bezalel	Sales
3	10006	Preusig	Anneke	Development
4	10008	Kalloufi	Saniya	Development
5	10012	Bridgland	Patricio	Development

8. List the frequency counts, in descending order, of all the employee last names (that is, how many employees share each last name).

```
SELECT employees.last_name, Count (*)  
FROM employees  
GROUP BY employees.last_name  
ORDER BY Count (*) DESC  
LIMIT 5;
```

	last_name character varying (30) 	count bigint 
1	Baba	226
2	Coorg	223
3	Gelosh	223
4	Sudbeck	222
5	Farris	222