

May 14th, 2021

Employee SQL challenge

--1. List the following details of each employee:

-- employee number, last name, first name, sex, and salary.

```
SELECT E.emp_no, E.first_name, E.last_name, E.sex, S.salary
FROM "EMPLOYEES" AS E
JOIN "SALARIES" AS S
ON (E.emp_no = S.emp_no)
ORDER BY E.emp_no ASC
LIMIT 10;
```

	emp_no integer	last_name character varying (200)	first_name character varying (200)	sex character varying (200)	salary money
1	10001	Facello	Georgi	M	\$60,117.00
2	10002	Simmel	Bezalel	F	\$65,828.00
3	10003	Bamford	Parto	M	\$40,006.00
4	10004	Koblick	Chirstian	M	\$40,054.00
5	10005	Maliniak	Kyoichi	M	\$78,228.00
6	10006	Preusig	Anneke	F	\$40,000.00
7	10007	Zielinski	Tzvetan	F	\$56,724.00
8	10008	Kalloufi	Saniya	M	\$46,671.00
9	10009	Peac	Sumant	F	\$60,929.00
10	10010	Piveteau	Duangkaew	F	\$72,488.00

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

```
SELECT first_name, last_name, hire_date
```

```
FROM "EMPLOYEES" AS E
```

```
WHERE hire_date LIKE '%1986'
```

```
ORDER BY first_name ASC
```

```
LIMIT 10;
```

	first_name character varying (200)	last_name character varying (200)	hire_date character varying (200)
1	Aamer	Luga	10/13/1986
2	Aamer	Homond	4/18/1986
3	Aamer	Heusch	4/30/1986
4	Aamer	Quaggetto	09/09/1986
5	Aamer	Cheshire	4/16/1986
6	Aamer	Merks	12/31/1986
7	Aamer	Kroll	5/17/1986
8	Aamer	Crabtree	10/19/1986
9	Aamer	Schwartzbauer	4/21/1986
10	Aamer	Tchuente	8/18/1986

--3. List the manager of each department with the following information:

-- department number, department name, the manager's employee number,

-- last name, first name.

```
SELECT DS.dept_no, DS.dept_name, E.emp_no, E.last_name, E.first_name
```

```
FROM "EMPLOYEES" AS E
```

```
JOIN "DEPT_MANAGER" AS D
```

```
ON (E.emp_no = D.emp_no)
```

```
JOIN "DEPARTMENTS" AS DS
```

```
ON (D.dept_no = DS.dept_no)
```

```
ORDER BY DS.dept_no ASC
```

```
LIMIT 10;
```

	dept_no character varying (200)	dept_name character varying (200)	emp_no integer	last_name character varying (200)	first_name character varying (200)
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	Ghazalie	Oscar

--4. List the department of each employee with the following information:

-- employee number, last name, first name, and department name.

```
SELECT E.emp_no, E.last_name, E.first_name, DS.dept_name
```

```
FROM "EMPLOYEES" AS E
```

```
JOIN "DEPT_EMP" AS DE
```

```
ON (E.emp_no = DE.emp_no)
```

```
JOIN "DEPARTMENTS" AS DS
```

```
ON (DE.dept_no = DS.dept_no)
```

```
ORDER BY E.emp_no ASC
```

```
LIMIT 10;
```

	 emp_no integer 	last_name character varying (200) 	first_name character varying (200) 	dept_name character varying (200) 
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
6	10006	Preusig	Anneke	Development
7	10007	Zielinski	Tzvetan	Research
8	10008	Kalloufi	Saniya	Development
9	10009	Peac	Sumant	Quality Management
10	10010	Piveteau	Duangkaew	Quality Management

--5. List first name, last name, and sex for employees whose first name

-- is "Hercules" and last names begin with "B."

SELECT first_name, last_name, sex

FROM "EMPLOYEES" AS E

WHERE first_name = 'Hercules'

AND last_name LIKE 'B%'

ORDER BY first_name ASC

LIMIT 10;

	first_name character varying (200)	last_name character varying (200)	sex character varying (200)
1	Hercules	Benzmuller	M
2	Hercules	Brendel	F
3	Hercules	Baranowski	M
4	Hercules	Barreiro	M
5	Hercules	Baer	M
6	Hercules	Bernardinello	F
7	Hercules	Basagni	M
8	Hercules	Biran	F
9	Hercules	Bernatsky	M
10	Hercules	Bail	F

--6. 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, DS.dept_name
FROM "EMPLOYEES" AS E
JOIN "DEPT_EMP" AS DE
ON (E.emp_no = DE.emp_no)
JOIN "DEPARTMENTS" AS DS
ON (DE.dept_no = DS.dept_no)
WHERE DS.dept_name = 'Sales'
ORDER BY E.emp_no ASC
LIMIT 10;
```

	 emp_no integer	 last_name character varying (200)	 first_name character varying (200)	 dept_name character varying (200)	
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	
6	10053	Zschoche	Sanjiv	Sales	
7	10060	Billingsley	Breannnda	Sales	
8	10061	Herber	Tse	Sales	
9	10068	Brattka	Charlene	Sales	
10	10087	Eugenio	Xinglin	Sales	

--7. 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, DS.dept_name
FROM "EMPLOYEES" AS E
JOIN "DEPT_EMP" AS DE
ON (E.emp_no = DE.emp_no)
JOIN "DEPARTMENTS" AS DS
ON (DE.dept_no = DS.dept_no)
WHERE DS.dept_name = 'Sales'
OR DS.dept_name = 'Development'
ORDER BY E.emp_no ASC
LIMIT 10;
```

	emp_no integer	last_name character varying (200)	first_name character varying (200)	dept_name character varying (200)
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
6	10014	Genin	Berni	Development
7	10016	Cappelletti	Kazuhito	Sales
8	10018	Peha	Kazuhide	Development
9	10021	Erde	Ramzi	Development
10	10022	Famili	Shahaf	Development

--8. 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 "Employees per Last_name"  
FROM "EMPLOYEES" AS E  
GROUP BY E.last_name  
ORDER BY E.last_name DESC  
LIMIT 10;
```

	last_name character varying (200)	Employees per Last_name bigint
1	Zykh	148
2	Zyda	181
3	Zwicker	176
4	Zweizig	180
5	Zumaque	195
6	Zultner	177
7	Zucker	185
8	Zuberek	209
9	Zschoche	165
10	Zongker	192

--Epilogue: ou look down at your badge to see that your employee ID number is 499942

--Who am I?

```
SELECT E.last_name, E.first_name, E.sex, DS.dept_name, TI.title, S.salary
FROM "EMPLOYEES" AS E
JOIN "DEPT_EMP" AS DE
ON (E.emp_no = DE.emp_no)
JOIN "DEPARTMENTS" AS DS
ON (DE.dept_no = DS.dept_no)
JOIN "TITLES" AS TI
ON (E.emp_title_id = TI.emp_title_id)
JOIN "SALARIES" AS S
ON (E.emp_no = S.emp_no)
WHERE E.emp_no = 499942;
```

	<div>last_name</div> <div>character varying (200)</div>	<div>first_name</div> <div>character varying (200)</div>	<div>sex</div> <div>character varying (200)</div>	<div>dept_name</div> <div>character varying (200)</div>	<div>title</div> <div>character varying (200)</div>	<div>salary</div> <div>money</div>
1	Foolsday	April	F	Development	Technique Leader	\$40,000.00