1)

```
1   -- 1) List the following details of each employee: employee number, last name, first name, sex, and salary.
2   Select
3       e.emp_num as employ_num,
4       e.first_name,
5       e.last_name,
6       e.gender,
7       s.income
8   From
9       employees e
10      join salary s on e.emp_num= s.emp_num
11  ORDER BY
12      s.income desc;
13
14
15
16
17
18  |
```

Data Output    Messages    Notifications

| | employ_num integer | first_name character varying (100) | last_name character varying (100) | gender character varying (10) | income double precision |
|---|---|---|---|---|---|
| 1 | 205000 | Charmane | Griswold | M | 129492 |
| 2 | 44188 | Slavian | Peac | M | 127238 |
| 3 | 444756 | Nahid | Varker | M | 127041 |
| 4 | 458302 | Poorav | Esposito | M | 126703 |
| 5 | 37558 | Juichirou | Thambidurai | M | 125469 |
| 6 | 296857 | Toshimo | Reghbati | M | 124357 |
| 7 | 20004 | Radoslaw | Pfau | M | 123749 |
| 8 | 109334 | Tsutomu | Alameldin | M | 123668 |
| 9 | 474456 | Martine | Heydon | F | 123477 |
| 10 | 474684 | Chinhyun | Klyachko | M | 122726 |
| 11 | 267005 | Filipe | Condotta | F | 122423 |
| 12 | 238117 | Mitsuyuki | Stanfel | M | 121617 |

Total rows: 1000 of 300024    Query complete 00:00:00.456

2)

pewlett_hackard_employee/postgres@PostgreSQL 15

Query    Query History

```sql
15  -- 2) List first name, last name, and hire date for employees who were hired in 1986.
16  Select
17      e.last_name,
18      e.first_name,
19      e.start_date
20  From
21      employees e
22  Where
23      extract(year from e.start_date)=1986
24  order by
25      e.start_date asc;
26  -- 3) List the manager of each department with the following information: department number, department name,
```

Data Output    Messages    Notifications

| | last_name 🔒 character varying (100) | first_name 🔒 character varying (100) | start_date 🔒 date |
|---|---|---|---|
| 1 | Godskesen | Sampalli | 1986-01-01 |
| 2 | Lanphier | Saniya | 1986-01-01 |
| 3 | Stanger | Juyoung | 1986-01-01 |
| 4 | Luce | Alejandra | 1986-01-01 |
| 5 | Vidal | Yinghua | 1986-01-01 |
| 6 | Bergere | Kristian | 1986-01-01 |
| 7 | Janocha | Youssef | 1986-01-01 |
| 8 | Prenel | Holgard | 1986-01-01 |
| 9 | Kroft | Achilleas | 1986-01-01 |
| 10 | Comyn | Nirmal | 1986-01-01 |
| 11 | Reeker | Masaki | 1986-01-01 |
| 12 | Duclos | Eirik | 1986-01-01 |
| 13 | Marrakchi | Abdelkader | 1986-01-01 |
| 14 | Serot | Jianhao | 1986-01-01 |
| 15 | Brookman | Constantino | 1986-01-01 |
| 16 | Asmuth | Uri | 1986-01-01 |
| 17 | Debuse | Domenico | 1986-01-01 |

Total rows: 1000 of 36150    Query complete 00:00:00.193

3)

pewlett_hackard_employee/postgres@PostgreSQL 15

Query    Query History

```
29
30   Select
31       d.dep_num,
32       d.dep_name,
33       e.last_name,
34       e.first_name
35   From
36       departments d
37       join dep_mngmt dm on d.dep_num=dm.dep_num
38       join employees e on dm.emp_num=e.emp_num;
39
40
```

Data Output    Messages    Notifications

| | dep_num<br>character varying (10) | dep_name<br>character varying (100) | last_name<br>character varying (100) | first_name<br>character varying (100) |
|---|---|---|---|---|
| 1 | d001 | Marketing | Markovitch | Margareta |
| 2 | d001 | Marketing | Minakawa | Vishwani |
| 3 | d002 | Finance | Alpin | Ebru |
| 4 | d002 | Finance | Legleitner | Isamu |
| 5 | d003 | Human Resources | Ossenbruggen | Shirish |
| 6 | d003 | Human Resources | Sigstam | Karsten |
| 7 | d004 | Production | Wegerle | Krassimir |
| 8 | d004 | Production | Cools | Rosine |
| 9 | d004 | Production | Kieras | Shem |
| 10 | d004 | Production | Ghazalie | Oscar |
| 11 | d005 | Development | Hagimont | DeForest |
| 12 | d005 | Development | DasSarma | Leon |
| 13 | d006 | Quality Management | Onuegbe | Peternela |
| 14 | d006 | Quality Management | Hofmeyr | Rutger |
| 15 | d006 | Quality Management | Quadeer | Sanjoy |
| 16 | d006 | Quality Management | Pesch | Dung |
| 17 | d007 | Sales | Kaelbling | Przemyslawa |

Total rows: 24 of 24    Query complete 00:00:00.048

4)

Query    Query History

```sql
42
43  -- 4) List the department of each employee with the following informati
44  Select
45      employees.emp_num,
46      employees.last_name,
47      employees.first_name,
48      departments.dep_name
49  from
50      employees
51      join dep_emp on employees.emp_num=dep_emp.emp_num
52      join departments on dep_emp.dep_num=departments.dep_num;
53
```

Data Output    Messages    Notifications

| | emp_num integer | last_name character varying (100) | first_name character varying (100) | dep_name character varying (100) |
|---|---|---|---|---|
| 1 | 10001 | Facello | Georgi | Development |
| 2 | 10005 | Maliniak | Kyoichi | Human Resources |
| 3 | 10010 | Piveteau | Duangkaew | Production |
| 4 | 10010 | Piveteau | Duangkaew | Quality Management |
| 5 | 10011 | Sluis | Mary | Customer Service |
| 6 | 10013 | Terkki | Eberhardt | Human Resources |
| 7 | 10017 | Bouloucos | Cristinel | Marketing |
| 8 | 10018 | Peha | Kazuhide | Production |
| 9 | 10018 | Peha | Kazuhide | Development |
| 10 | 10019 | Haddadi | Lillian | Research |
| 11 | 10026 | Berztiss | Yongqiao | Production |
| 12 | 10035 | Chappelet | Alain | Production |
| 13 | 10037 | Makrucki | Pradeep | Development |
| 14 | 10043 | Tzvieli | Yishay | Development |
| 15 | 10045 | Shanbhogue | Moss | Production |
| 16 | 10051 | Caine | Hidefumi | Production |
| 17 | 10055 | Dredge | Georgy | Marketing |

Total rows: 1000 of 331603    Query complete 00:00:00.504

5)

pewlett_hackard_employee/postgres@PostgreSQL 15        ⌄

Query    Query History

```
53
54
55   -- 5) List first name, last name, and sex for employees whose first name is "Hercules" and last names begin with "B."
56   Select
57       employees.first_name,
58       employees.last_name,
59       employees.gender
60   from
61       employees
62   where first_name='Hercules' AND last_name LIKE 'B%';
63
```

Data Output    Messages    Notifications

| | first_name<br>character varying (100) | last_name<br>character varying (100) | gender<br>character varying (10) |
|---|---|---|---|
| 1 | Hercules | Baer | M |
| 2 | Hercules | Biron | F |
| 3 | Hercules | Birge | F |
| 4 | Hercules | Berstel | F |
| 5 | Hercules | Bernatsky | M |
| 6 | Hercules | Bodoff | M |
| 7 | Hercules | Benantar | F |
| 8 | Hercules | Baranowski | M |
| 9 | Hercules | Bisiani | F |
| 10 | Hercules | Bahr | M |
| 11 | Hercules | Biran | F |
| 12 | Hercules | Bain | F |
| 13 | Hercules | Barreiro | M |
| 14 | Hercules | Baak | M |
| 15 | Hercules | Bail | F |
| 16 | Hercules | Basagni | M |
| 17 | Hercules | Bernardinello | F |
| 18 | Hercules | Benzmuller | M |

Total rows: 20 of 20    Query complete 00:00:00.095

6)

```
65  -- 6) List all employees in the Sales department, including their employee number, last name, first name, and department name.
66  Select
67      employees.emp_num,
68      employees.last_name,
69      employees.first_name,
70      departments.dep_name
71  From
72      employees
73      join dep_emp on employees.emp_num=dep_emp.emp_num
74      join departments on dep_emp.dep_num=departments.dep_num
75
76  Where
77      departments.dep_name='Sales';
78
```

**Data Output**   Messages   Notifications

| | emp_num integer | last_name character varying (100) | first_name character varying (100) | dep_name character varying (100) |
|---|---|---|---|---|
| 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 | Breannda | Sales |
| 8 | 10061 | Herber | Tse | Sales |
| 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 |

Total rows: 1000 of 52245    Query complete 00:00:00.124

7)

pewlett_hackard_employee/postgres@PostgreSQL 15

Query   Query History

```
79  -- 7) List all employees in the Sales and Development departments, including their employee number, last name, first name, and dep
80
81  Select
82      employees.emp_num,
83      employees.last_name,
84      employees.first_name,
85      departments.dep_name
86  from
87      employees
88      join dep_emp on employees.emp_num=dep_emp.emp_num
89      join departments on dep_emp.dep_num=departments.dep_num
90  Where
91      departments.dep_name='Sales'  OR departments.dep_name='Development';
92
```

Data Output   Messages   Notifications

| | emp_num<br>integer | last_name<br>character varying (100) | first_name<br>character varying (100) | dep_name<br>character varying (100) |
|---|---|---|---|---|
| 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 |
| 11 | 10023 | Montemayor | Bojan | Development |
| 12 | 10025 | Heyers | Prasadram | Development |
| 13 | 10027 | Reistad | Divier | Development |
| 14 | 10028 | Tempesti | Domenick | Development |
| 15 | 10031 | Joslin | Karsten | Development |

Total rows: 1000 of 137952      Query complete 00:00:00.175

8)

```
94
95   -- 8) List the frequency count of employee last names (i.e., how many employees share each last name) in descending order.
96
97   Select
98       e.last_name,
99       count(*)
100  From
101      employees e
102  group by
103      e.last_name
104  order by
105      count(*) desc;
106
```

Data Output   Messages   Notifications

| last_name character varying (100) | count bigint |
|---|---|
| 1 | Baba | 226 |
| 2 | Gelosh | 223 |
| 3 | Coorg | 223 |
| 4 | Sudbeck | 222 |
| 5 | Farris | 222 |
| 6 | Adachi | 221 |
| 7 | Osgood | 220 |
| 8 | Masada | 218 |
| 9 | Neiman | 218 |
| 10 | Mandell | 218 |
| 11 | Wendorf | 217 |
| 12 | Boudaillier | 217 |
| 13 | Mahnke | 216 |
| 14 | Pettis | 216 |
| 15 | Solares | 216 |

Total rows: 1000 of 1638      Query complete 00:00:00.082