

# Lab:6

Q1:

The HR department wants to determine the names of all the employees who were hired after Davies. Create a query to display the name and hire date of any employee hired after employee Davies.

Solution:

```
SQL Plus
SQL> SELECT e.hire_date , e.last_name
 2 FROM employees e JOIN employees davies
 3 ON
 4   davies.last_name='Davies'
 5  and e.hire_date>davies.hire_date;

HIRE_DATE LAST_NAME
-----
21-SEP-05 Kochhar
03-JAN-06 Hunold
21-MAY-07 Ernst
25-JUN-05 Austin
05-FEB-06 Pataballa
07-FEB-07 Lorentz
28-SEP-05 Chen
30-SEP-05 Sciarra
07-MAR-06 Urman
07-DEC-07 Popp
24-DEC-05 Baida

HIRE_DATE LAST_NAME
-----
24-JUL-05 Tobias
15-NOV-06 Himuro
10-AUG-07 Colmenares
10-APR-05 Fripp
10-OCT-05 Vollman
16-NOV-07 Mourgos
16-JUL-05 Nayer
28-SEP-06 Mikkilineni
14-JAN-07 Landry
08-MAR-08 Markle
20-AUG-05 Bissot

HIRE_DATE LAST_NAME
-----
30-OCT-05 Atkinson
16-FEB-05 Marlow
10-APR-07 Olson
26-AUG-06 Rogers
12-DEC-07 Gee
06-FEB-08 Philtanker
26-OCT-05 Stiles
12-FEB-06 Seo
06-APR-06 Patel
```

Q2:

The HR department needs to find the names and hire dates of all the employees who were hired before their managers, along with their managers' names and hire dates.

Solution:

```

SQL Plus

SQL> Select x.last_name,x.hire_date,
2 y.last_name,y.hire_date
3 FROM
4 employees x JOIN employees y
5 ON
6 y.employee_id=x.manager_id
7 AND
8 y.hire_date > x.hire_date;

```

LAST_NAME	HIRE_DATE	LAST_NAME	HIRE_DATE
Kaufling	01-MAY-03	King	17-JUN-03
Raphaely	07-DEC-02	King	17-JUN-03
De Haan	13-JAN-01	King	17-JUN-03
Higgins	07-JUN-02	Kochhar	21-SEP-05
Baer	07-JUN-02	Kochhar	21-SEP-05
Mavris	07-JUN-02	Kochhar	21-SEP-05
Whalen	17-SEP-03	Kochhar	21-SEP-05
Greenberg	17-AUG-02	Kochhar	21-SEP-05
Austin	25-JUN-05	Hunold	03-JAN-06
Faviet	16-AUG-02	Greenberg	17-AUG-02
Bull	20-FEB-05	Frapp	10-APR-05
Sarchand	27-JAN-04	Frapp	10-APR-05
Marlow	16-FEB-05	Frapp	10-APR-05
Everett	03-MAR-05	Vollman	10-OCT-05
Bell	04-FEB-04	Vollman	10-OCT-05
Ladwig	14-JUL-03	Vollman	10-OCT-05
OConnell	21-JUN-07	Mourgos	16-NOV-07
Feeney	23-MAY-06	Mourgos	16-NOV-07
Walsh	24-APR-06	Mourgos	16-NOV-07
Vargas	09-JUL-06	Mourgos	16-NOV-07
Matos	15-MAR-06	Mourgos	16-NOV-07
Davies	29-JAN-05	Mourgos	16-NOV-07
Rajs	17-OCT-03	Mourgos	16-NOV-07
McEwen	01-AUG-04	Partners	05-JAN-05
Sully	04-MAR-04	Partners	05-JAN-05
King	30-JAN-04	Partners	05-JAN-05
Bates	24-MAR-07	Cambrault	15-OCT-07
Smith	23-FEB-07	Cambrault	15-OCT-07

Q3:

The HR department needs a report of all employees. Write a query to display the last name, department number, and department name for all the employees.

Solution:

```

SQL Plus
QL> SELECT
2  x.last_name,x.department_id,
3  y.department_name
4  FROM
5  employees x JOIN departments y
6  ON
7  x.department_id = y.department_id;

```

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Abel	10	Administration
Burns	20	Marketing
Chen	20	Marketing
De Haan	30	Purchasing
Ivanov	30	Purchasing
Javiers	30	Purchasing
Patel	30	Purchasing
Rafael	30	Purchasing
Simons	30	Purchasing
Tobias	30	Purchasing
Umar	30	Purchasing
Venkat	30	Purchasing
Whalen	40	Human Resources
Winters	50	Shipping

  

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping

  

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping
Al	50	Shipping

Q4:

The HR department needs a report of employees in Toronto. Display the last name, job, department number, and the department name for all employees who work in Toronto

Solution:

```
SQL Plus

SQL> Select
  2  x.last_name, x.job_id,
  3  y.department_id, y.department_name
  4  FROM
  5  employees x JOIN departments y
  6  ON (x.department_id = y.department_id)
  7  JOIN locations k
  8  ON (y.location_id = k.location_id)
  9  WHERE
 10  lower(k.city) = 'toronto';

LAST_NAME          JOB_ID  DEPARTMENT_ID
-----
DEPARTMENT_NAME
-----
Hartstein          MK_MAN          20
Marketing
Fay                MK_REP          20
Marketing

SQL>
```

Q5:

Create a report to display employees' last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, respectively

Solution:

```
SQL Plus
SQL> SELECT
  2  x.last_name Employee,
  3  x.employee_id EMP#,
  4  y.last_name Manager,
  5  y.employee_id Mgr#
  6  FROM
  7  employees x JOIN employees y
  8  ON
  9  x.manager_id=y.employee_id;

EMPLOYEE      EMP#  MANAGER
MGR#
-----
Hartstein      201  King
100
Zlotkey        149  King
100
Cambrault      148  King
100
Errazuriz      147  King
100
Partners       146  King
100
Russell        145  King
100
Moungos        124  King
100
Vollman        123  King
100
Kaufling       122  King
100
Fripp          121  King
100
Weiss          120  King
100

EMPLOYEE      EMP#  MANAGER
MGR#
-----
Raphaely       114  King
100
De Haan        102  King
100
Kochhar        101  King
100
```

Q6:

Create a report for the HR department that displays employee last names, department numbers, and all the employees who work in the same department as a given employee. Give each column an appropriate label.

Solution:

```

SQL Plus
SQL> SELECT
  2  x.last_name EMP_Name,
  3  x.department_id emp_department,
  4  y.last_name Colleague
  5  FROM
  6  employees x JOIN employees y
  7  ON
  8  (x.department_id=y.department_id)
  9  WHERE
 10  x.employee_id <> y.employee_id
 11  AND x.last_name='King';

```

EMP_NAME	EMP_DEPARTMENT	COLLEAGUE
King	90	Kochhar
King	90	De Haan
King	80	Russell
King	80	Partners
King	80	Errazuriz
King	80	Cambrault
King	80	Zlotkey
King	80	Tucker
King	80	Bernstein
King	80	Hall
King	80	Olsen

  

EMP_NAME	EMP_DEPARTMENT	COLLEAGUE
King	80	Cambrault
King	80	Tuvault
King	80	Sully
King	80	McEwen
King	80	Smith
King	80	Doran
King	80	Sewall
King	80	Vishney
King	80	Greene
King	80	Marvins
King	80	Lee

  

EMP_NAME	EMP_DEPARTMENT	COLLEAGUE
King	80	Ande
King	80	Banda
King	80	Ozer
King	80	Bloom
King	80	Fay

Q7:

The HR department needs a report on job grades and salaries. To familiarize yourself with the JOB\_GRADES table, first show the structure of the JOB\_GRADES table. Then create a query that displays the name, job, department name, salary, and grade for all employees

Solution:

```
SQL Plus

SQL> SELECT
  2  x.last_name,x.job_id,x.salary,
  3  y.department_name,
  4  z.grade
  5  FROM
  6  employees x,
  7  departments y,
  8  salgrade z
  9  WHERE
 10  x.department_id=y.department_id
 11  AND
 12  x.salary BETWEEN z.losal
 13  AND
 14  z.hisal;

LAST_NAME          JOB_ID          SALARY DEPARTMENT_NAME
-----
GRADE
-----
Fox                SA_REP          9600 Sales
      5
Bernstein          SA_REP          9500 Sales
      5
Greene             SA_REP          9500 Sales
      5

LAST_NAME          JOB_ID          SALARY DEPARTMENT_NAME
-----
GRADE
-----
Sully             SA_REP          9500 Sales
      5
McEwen            SA_REP          9000 Sales
      5
Faviet            FI_ACCOUNT      9000 Finance
      5

LAST_NAME          JOB_ID          SALARY DEPARTMENT_NAME
-----
GRADE
-----
```

Q8:

The HR department needs a query that prompts the user for an employee last name. The query then displays the last name and hire date of any employee in the same department as the employee whose name they supply (excluding that employee). For example, if the user enters Zlotkey, find all employees who work with Zlotkey (excluding Zlotkey).

Solution:

```
SQL Plus

SQL> SELECT
  2  last_name , hire_date
  3  FROM
  4  employees
  5  WHERE
  6  department_id=(SELECT department_id
  7  FROM
  8  employees
  9  WHERE
 10  last_name = 'Zlotkey')
 11  AND last_name <> 'Zlotkey';

LAST_NAME          HIRE_DATE
-----
Russell            01-OCT-04
Partners           05-JAN-05
Errazuriz          10-MAR-05
Cambrault          15-OCT-07
Tucker             30-JAN-05
Bernstein          24-MAR-05
Hall               20-AUG-05
Olsen              30-MAR-06
Cambrault          09-DEC-06
Tuvault            23-NOV-07
King               30-JAN-04

LAST_NAME          HIRE_DATE
-----
Sully              04-MAR-04
McEwen             01-AUG-04
Smith              10-MAR-05
Doran              15-DEC-05
Sewall             03-NOV-06
Vishney            11-NOV-05
Greene             19-MAR-07
Marvins            24-JAN-08
Lee                23-FEB-08
Ande               24-MAR-08
Banda              21-APR-08

LAST_NAME          HIRE_DATE
-----
Ozer               11-MAR-05
Bloom              23-MAR-06
Fox                24-JAN-06
```

Q9:

Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains the letter “u”.

Solution:



```
SQL Plus

SQL> SELECT
 2  employee_id, last_name
 3  FROM
 4  employees
 5  WHERE
 6  department_id IN
 7  (
 8  SELECT
 9  department_id
10  FROM
11  employees
12  WHERE
13  last_name like '%u%'
14  );

EMPLOYEE_ID LAST_NAME
-----
107 Lorentz
106 Pataballa
105 Austin
104 Ernst
103 Hunold
119 Colmenares
118 Himuro
117 Tobias
116 Baida
115 Khoo
114 Raphaely

EMPLOYEE_ID LAST_NAME
-----
199 Grant
198 OConnell
197 Feeney
196 Walsh
195 Jones
194 McCain
193 Everett
192 Bell
191 Perkins
190 Gates
189 Dilly

EMPLOYEE_ID LAST_NAME
-----
```

Q10:

The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

Solution:

SQL Plus

```
SQL> SELECT
  2  last_name,department_id,job_id
  3  FROM
  4  employees
  5  WHERE
  6  department_id IN
  7  (
  8  SELECT
  9  department_id
 10  FROM
 11  departments
 12  WHERE
 13  location_id = 1700
 14  );
```

LAST_NAME	DEPARTMENT_ID	JOB_ID
Whalen	10	AD_ASST
Raphaely	30	PU_MAN
Khoo	30	PU_CLERK
Baida	30	PU_CLERK
Tobias	30	PU_CLERK
Himuro	30	PU_CLERK
Colmenares	30	PU_CLERK
King	90	AD PRES
Kochhar	90	AD_VP
De Haan	90	AD_VP
Greenberg	100	FI_MGR

LAST_NAME	DEPARTMENT_ID	JOB_ID
Faviet	100	FI_ACCOUNT
Chen	100	FI_ACCOUNT
Sciarra	100	FI_ACCOUNT
Urman	100	FI_ACCOUNT
Popp	100	FI_ACCOUNT
Higgins	110	AC_MGR
Gietz	110	AC_ACCOUNT

18 rows selected.

SQL>