```
select last_name, department_id, department_name
from HR.employees
JOIN HR.departments
using (department_id);
```

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Whalen	10	Administration
Fay	20	Marketing
Hartstein	20	Marketing
Tobias	30	Purchasing
Colmenares	30	Purchasing
Baida		Purchasing
Raphaely		Purchasing
Khoo		Purchasing
Himuro		Purchasing
Mavris		Human Resources
Feeney	50	Shipping
LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Fleaur		Shipping
Fripp		Shipping
Gates		Shipping
Gee		Shipping
Geoni		Shipping
Grant		Shipping
Jones		Shipping
Kaufling		Shipping Shipping
Ladwig Everett		Shipping Shipping
Dilly		Shipping
DIIIy	50	Surbbrug
LAST_NAME		DEPARTMENT_NAME
Dellinger	50	Shipping
Dellinger Davies	50 50	Shipping Shipping
Dellinger Davies Chung	50 50	Shipping Shipping Shipping Shipping
Dellinger Davies Chung Cabrio	50 50 50 50	Shipping Shipping Shipping Shipping Shipping
Dellinger Davies Chung Cabrio Bull	50 50 50 50 50 50	Shipping Shipping Shipping Shipping Shipping Shipping Shipping
Dellinger Davies Chung Cabrio Bull Bissot	50 50 50 50 50 50	Shipping Shipping Shipping Shipping Shipping Shipping Shipping Shipping
Dellinger Davies Chung Cabrio Bull	50 50 50 50 50 50 50	Shipping Shipping Shipping Shipping Shipping Shipping Shipping Shipping Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson	50 50 50 50 50 50 50 50	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell	50 50 50 50 50 50 50 50	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry	50 50 50 50 50 50 50 50	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss	50 50 50 50 50 50 50 50 50	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME	50 50 50 50 50 50 50 50 50 DEPARTMENT_ID	Shipping DEPARTMENT_NAME
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME	50 50 50 50 50 50 50 50 50 DEPARTMENT_ID	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME Vollman Vargas	50 50 50 50 50 50 50 50 50 50 DEPARTMENT_ID	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME	50 50 50 50 50 50 50 50 50 50 DEPARTMENT_ID 	Shipping DEPARTMENT_NAME
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME	50 50 50 50 50 50 50 50 50 DEPARTMENT_ID 	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME	50 50 50 50 50 50 50 50 50 DEPARTMENT_ID 	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME Vollman Vargas Taylor Mallin Markle	50 50 50 50 50 50 50 50 50 50 50 50 50 5	Shipping
Dellinger Davies Chung Cabrio Bull Bissot Bell Atkinson Landry Weiss Walsh LAST_NAME Vollman Vargas Taylor Mallin Markle Marlow	50 50 50 50 50 50 50 50 50 50 DEPARTMENT_ID 	Shipping

```
Mikkilineni
                               50 Shipping
                               50 Shipping
Mourgos
                               50 Shipping
Nayer
                     DEPARTMENT ID DEPARTMENT NAME
------
OConnell 0
                              50 Shipping
Olson
                              50 Shipping
Patel
                               50 Shipping
Perkins
                               50 Shipping
                              50 Shipping
Philtanker
                              50 Shipping
Rajs
                              50 Shipping
Rogers
                               50 Shipping
Sarchand
Seo
                               50 Shipping
Stiles
                               50 Shipping
Sullivan
                               50 Shipping
LAST_NAME
                   DEPARTMENT_ID DEPARTMENT_NAME
Austin
                               60 IT
Pataballa
                               60 IT
Ernst
                               60 IT
Lorentz
                               60 IT
Hunold
                              60 IT
                              70 Public Relations
Baer
Abel
                              80 Sales
                              80 Sales
Ande
Banda
                               80 Sales
                               80 Sales
Bates
Bernstein
                               80 Sales
                     DEPARTMENT_ID DEPARTMENT_NAME
LAST NAME
______
Bloom
                               80 Sales
Cambrault
                               80 Sales
                              80 Sales
Cambrault
Doran
                              80 Sales
Errazuriz
                              80 Sales
                              80 Sales
Fox
Greene
                              80 Sales
                              80 Sales
Hall
                              80 Sales
Hutton
                              80 Sales
Johnson
                              80 Sales
King
LAST NAME
                     DEPARTMENT_ID DEPARTMENT_NAME
_____
                              80 Sales
Lee
                               80 Sales
                              80 Sales
Livingston
Marvins
                              80 Sales
                              80 Sales
McEwen
Olsen
                              80 Sales
0zer
                              80 Sales
Partners
                               80 Sales
Russell
                              80 Sales
Sewall
                              80 Sales
Smith
                               80 Sales
                     DEPARTMENT ID DEPARTMENT NAME
LAST NAME
```

```
Smith
                             80 Sales
Sully
                             80 Sales
Taylor
                             80 Sales
                             80 Sales
Tucker
Tuvault
                             80 Sales
Vishney
                            80 Sales
Zlotkey
                             80 Sales
                             90 Executive
Kochhar
                             90 Executive
King
De Haan
                             90 Executive
                            100 Finance
Popp
LAST NAME
                    DEPARTMENT ID DEPARTMENT NAME
______
Urman
                            100 Finance
Chen
                            100 Finance
                            100 Finance
Faviet
Sciarra
                            100 Finance
                            100 Finance
Greenberg
Gietz
                            110 Accounting
Higgins
                            110 Accounting
106 rows selected.
select job_title, city, state_province, country_id
from HR.jobs, HR.locations
where(job_id like 'SA%' and location_id=2500);
                                                STATE_PROVINCE CO
JOB TITLE
Oxford
Sales Manager
                           0xford
                                                                          UK
Sales Representative
                            0xford
                                                     Oxford
                                                                          UK
select e.last_name, d.department_name, d.location_id, l.city
from HR.employees e, HR.departments d, HR.locations 1
where e.department_id = d.department_id and
d.location_id = l.location_id and e.commission_pct is not NULL;
            DEPARTMENT_NAME
                                   LOCATION_ID CITY
LAST_NAME
Russell
                                                   2500 Oxford
                    Sales
                                                   2500 Oxford
Partners
                    Sales
                    Sales
Errazuriz
                                                   2500 Oxford
Cambrault
                    Sales
                                                   2500 Oxford
Zlotkey
                   Sales
                                                   2500 Oxford
Tucker
                    Sales
                                                   2500 Oxford
Bernstein
                    Sales
                                                   2500 Oxford
Hall
                    Sales
                                                   2500 Oxford
Olsen
                                                   2500 Oxford
                    Sales
Cambrault
                    Sales
                                                   2500 Oxford
Tuvault
                    Sales
                                                   2500 Oxford
LAST_NAME
                    DEPARTMENT_NAME
                                            LOCATION_ID CITY
                                                   2500 Oxford
                    Sales
King
                                                   2500 Oxford
                    Sales
Sully
                    Sales
                                                   2500 Oxford
McEwen
```

Smith	Sales	2500	Oxford
Doran	Sales		Oxford
Sewall	Sales		Oxford
Vishney	Sales		Oxford
Greene	Sales		Oxford
Marvins	Sales		0xford
Lee	Sales		Oxford
Ande	Sales	2500	Oxford
LAST_NAME	DEPARTMENT_NAME	LOCATION ID	CTTV
LA31_NAME	DEPARTMENT_NAME	LOCATION_ID	CITT
- Banda	Calos	2500	Ovford
Banda	Sales		Oxford
0zer	Sales		Oxford
Bloom	Sales		Oxford
Fox	Sales		Oxford
Smith	Sales	2500	Oxford
Bates	Sales	2500	Oxford
Kumar	Sales	2500	Oxford
Abel	Sales		Oxford
Hutton	Sales		Oxford
Taylor	Sales		Oxford
Livingston	Sales	2500	Oxford
LAST_NAME	DEPARTMENT_NAME	-	CITY
-	6.1	2500	0.5
Johnson	Sales	2500	Oxford
34 rows selected.			
34 rows selected.			
34 rows selected. select e.last_name, d.de	partment_name		
select e.last_name, d.de			
select e.last_name, d.de from HR.employees e, HR.	departments d	ike '%a%';	
select e.last_name, d.de from HR.employees e, HR.		ike '%a%';	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = 0</pre>	departments d	ike '%a%';	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = 0</pre>	departments d d.department_id and last_name li	ike '%a%';	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = 0</pre>	departments d d.department_id and last_name li	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = c LAST_NAME</pre>	departments d d.department_id and last_name la DEPARTMENT_NAME Administration	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR.o where e.department_id = o LAST_NAME Whalen Fay</pre>	departments d d.department_id and last_name li DEPARTMENT_NAME - Administration Marketing	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR.e where e.department_id = e LAST_NAME Whalen Fay Hartstein</pre>	departments d d.department_id and last_name li DEPARTMENT_NAME	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = d LAST_NAME Whalen Fay Hartstein Baida</pre>	departments d d.department_id and last_name la DEPARTMENT_NAMEAdministration Marketing Marketing Purchasing	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = d LAST_NAME Whalen Fay Hartstein Baida Raphaely</pre>	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = 0 LAST_NAME Whalen Fay Hartstein Baida Raphaely Tobias</pre>	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Purchasing Purchasing Purchasing	ike '%a%'; -	
<pre>select e.last_name, d.de from HR.employees e, HR. where e.department_id = 0 LAST_NAME Whalen Fay Hartstein Baida Raphaely Tobias</pre>	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Human Resources	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.e where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.e where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%'; -	
select e.last_name, d.der from HR.employees e, HR.owhere e.department_id = 0 LAST_NAME	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping Shipping DEPARTMENT_NAME	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name la DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Purchasing Shipping Shipping Shipping Shipping Shipping DEPARTMENT_NAME	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.w where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping Shipping Shipping DEPARTMENT_NAME Shipping Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping Shipping Shipping DEPARTMENT_NAME Shipping Shipping Shipping Shipping Shipping Shipping	ike '%a%'; -	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME LAST_NAME Whalen Fay Hartstein Baida Raphaely Tobias Colmenares Mavris Davies Cabrio Markle LAST_NAME LAST_NAME LAST_NAME Tobias Cabrio Markle	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%'; -	
select e.last_name, d.de from HR.employees e, HR.where e.department_id = d LAST_NAME 	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping Shipping Shipping Shipping DEPARTMENT_NAME Shipping Shipping Shipping Shipping Shipping Shipping	ike '%a%'; -	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME LAST_NAME Whalen Fay Hartstein Baida Raphaely Tobias Colmenares Mavris Davies Cabrio Markle LAST_NAME LAST_NAME LAST_NAME Tobias Cabrio Markle	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%'; -	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%';	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%';	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%';	
select e.last_name, d.der from HR.employees e, HR.a where e.department_id = a LAST_NAME	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%';	
select e.last_name, d.der from HR.employees e, HR.where e.department_id = d LAST_NAME	departments d d.department_id and last_name li DEPARTMENT_NAME Administration Marketing Marketing Purchasing Purchasing Purchasing Purchasing Human Resources Shipping	ike '%a%';	

```
McCain
                       Shipping
LAST NAME
                       DEPARTMENT NAME
Matos
                       Shipping
Marlow
                       Shipping
Mallin
                       Shipping
                       Shipping
Landry
Ladwig
                       Shipping
Kaufling
                       Shipping
                       Shipping
Grant
Gates
                       Shipping
Fleaur
                       Shipping
Pataballa
                       ΙT
                       Public Relations
Baer
LAST NAME
                       DEPARTMENT NAME
Banda
                       Sales
Cambrault
                       Sales
Taylor
                      Sales
Tuvault
                      Sales
Kumar
                      Sales
Marvins
                      Sales
Bates
                      Sales
Errazuriz
                       Sales
                       Sales
Doran
                       Sales
Sewall
                       Sales
Partners
           DEPARTMENT_NAME
LAST_NAME
Hall
                     Sales
Cambrault
                      Sales
De Haan
                      Executive
Kochhar
                      Executive
Sciarra
                      Finance
Faviet
                       Finance
Urman
                       Finance
51 rows selected.
select e.last_name, j.job_title, e.department_id, d.department_name, l.city
from HR.employees e, HR.departments d, HR.jobs j, HR.locations l
where e.department_id = d.department_id and e.job_id = j.job_id
and d.location_id = 1.location_id and 1.location_id = 1800;
LAST_NAME
                       JOB_TITLE
                                                        DEPARTMENT_ID DEPARTMENT_NAME
Hartstein
                       Marketing Manager
                                                                  20 Marketing
Toronto
Fay
                       Marketing Representative
                                                                  20 Marketing
Toronto
select e.last_name "Employee", e.employee_id "EMP#", m.last_name "Manager", m.employee_id "MN#"
from HR.employees e, HR.employees m
where e.manager_id = m.employee_id ;
```

EMP# Manager

MN#

Employee

Ozer	168	Cambrault	148
Bloom		Cambrault	148
Fox		Cambrault	148
Smith	-	Cambrault	148
Bates		Cambrault	148
Kumar		Cambrault	148
Hunold		De Haan	102
Vishney		Errazuriz	147
Greene	_	Errazuriz	147
Marvins		Errazuriz	147
Lee		Errazuriz	147
	103	211 4241 12	1-17
Employee	EMP#	Manager	MN#
Ande	166	Errazuriz	147
Banda	167	Errazuriz	147
Bissot		Fripp	121
Atkinson		Fripp	121
Marlow		Fripp	121
Olson		Fripp	121
Sarchand		Fripp	121
Bull		Fripp	121
Dellinger		Fripp	121
Cabrio		Fripp	121
Faviet		Greenberg	108
Taviec	103	di celibei g	100
Employee	EMP#	Manager	MN#
Chen	110	Greenberg	108
Sciarra		Greenberg	108
Urman		Greenberg	108
Рорр		Greenberg	108
Fay		Hartstein	201
Gietz		Higgins	205
Ernst		Hunold	103
Austin		Hunold	103
Pataballa		Hunold	103
Lorentz		Hunold	103
Mallin		Kaufling	122
Hallin	133	Mad IIIIg	122
Employee	EMP#	Manager	MN#
Rogers	134	Kaufling	122
Gee		Kaufling	122
Philtanker		Kaufling	122
Chung		Kaufling	122
Dilly		Kaufling	122
Gates		Kaufling	122
Perkins		Kaufling	122
Kochhar		King	100
De Haan		King	100
Raphaely		King	100
Weiss		King	100
HC133	120	1,4116	100
Employee	EMP#	Manager	MN#
Fripp	121	King	100
Kaufling		King	100
Vollman		King	100
Mourgos		King	100
	124		100

n 11			
Russell	145	King	100
Partners		King	100
		<u> </u>	
Errazuriz		King	100
Cambrault	148	King	100
Zlotkey	149	King	100
Hartstein		King	100
Greenberg		Kochhar	101
di eelibei g	100	Kociiiai	101
Employee	EMP#	Manager	MN#
District and the second	200	W. alaba a	
Whalen		Kochhar	101
Mavris	203	Kochhar	101
Baer	204	Kochhar	101
Higgins	205	Kochhar	101
Rajs	141	Mourgos	124
Davies		-	124
		Mourgos	
Matos		Mourgos	124
Vargas	144	Mourgos	124
Walsh	196	Mourgos	124
Feeney		Mourgos	124
OConnell		Mourgos	124
ocomen	190	rioui gos	124
Employee	EMP#	Manager	MN#
Grant	199	Mourgos	124
King		Partners	146
Sully		Partners	146
-	_		_
McEwen		Partners	146
Smith	159	Partners	146
Doran	160	Partners	146
Sewall	161	Partners	146
Khoo	115	Raphaely	114
Baida		Raphaely	114
	110	карпаету	
T = - - -	117	Daulas 1	111
Tobias		Raphaely	114
Tobias Himuro		Raphaely Raphaely	114 114
	118		
Himuro Employee	118 EMP#	Raphaely Manager	114 MN#
Himuro Employee Colmenares	118 EMP# 119	ManagerRaphaely	114 MN# 114
Himuro Employee Colmenares Tucker	118 EMP# 119 150	Manager Raphaely Russell	MN# 114 145
Himuro Employee Colmenares Tucker Bernstein	EMP# 119 150 151	Raphaely ManagerRaphaely Russell Russell	MN# 114 145 145
Himuro Employee Colmenares Tucker Bernstein Hall	EMP# 119 150 151 152	Raphaely Manager Raphaely Russell Russell Russell	MN# 114 145 145 145
Himuro Employee Colmenares Tucker Bernstein	EMP# 119 150 151 152	Raphaely ManagerRaphaely Russell Russell	MN# 114 145 145
Himuro Employee Colmenares Tucker Bernstein Hall	EMP# 119 150 151 152 153	Raphaely Manager Raphaely Russell Russell Russell Russell	MN# 114 145 145 145 145
Himuro Employee	EMP# 119 150 151 152 153 154	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Russell	MN# 114 145 145 145 145 145
Himuro Employee	EMP# 119 150 151 152 153 154 155	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Russell Russell Russell	MN# 114 145 145 145 145 145 145
Himuro Employee	EMP# 119 150 151 152 153 154 155 137	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Russell Vollman	MN# 114 145 145 145 145 145 145 145 145
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Russell Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139	Raphaely Manager	MN# 114 145 145 145 145 145 145 145 145
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Russell Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140	Raphaely Manager	MN# 114 145 145 145 145 145 145 123 123
Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP#	Manager Raphaely Russell Russell Russell Russell Russell Vollman Vollman Vollman Vollman Vollman Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123 123 MN#
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP#	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman Vollman Vollman Vollman Vollman Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123 123 123
Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP#	Manager Raphaely Russell Russell Russell Russell Russell Vollman Vollman Vollman Vollman Vollman Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123 123 MN#
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman Vollman Vollman Vollman Vollman Vollman Vollman	MN# 114 145 145 145 145 145 145 123 123 123 123
Employee Colmenares Tucker Bernstein Hall Olsen Cambrault Tuvault Ladwig Stiles Seo Patel Employee Bell Everett McCain	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194	Manager Raphaely Russell Russell Russell Russell Russell Vollman	MN# 114 145 145 145 145 145 145 123 123 123 MN# 123 123 123
Employee Colmenares Tucker Bernstein Hall Olsen Cambrault Tuvault Ladwig Stiles Seo Patel Employee Bell Everett McCain Jones	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195	Raphaely Manager	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123
Employee Colmenares Tucker Bernstein Hall Olsen Cambrault Tuvault Ladwig Stiles Seo Patel Employee Bell Everett McCain Jones Nayer	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195 125	Manager Raphaely Russell Russell Russell Russell Russell Vollman	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123 123
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195 125 126	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123 123 123 123
Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195 125 126 127	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman Weiss Weiss	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123 123 120 120 120
Himuro Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195 125 126 127	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123 123 123 123
Employee	EMP# 119 150 151 152 153 154 155 137 138 139 140 EMP# 192 193 194 195 125 126 127 128	Raphaely Manager Raphaely Russell Russell Russell Russell Russell Vollman Weiss Weiss	MN# 114 145 145 145 145 145 145 123 123 123 123 123 123 123 123 120 120 120

Fleaur Sullivan	_	Weiss Weiss	120 120
Employee	EMP#	Manager	MN#
Geoni	183	Weiss	120
Abel	174	Zlotkey	149
Hutton		Zlotkey	149
Taylor		Zlotkey	149
Livingston		Zlotkey	149
Grant	178	Zlotkey	149
Johnson	179	Zlotkey	149

select e.last_name "Employee", e.employee_id "EMP#", m.last_name "Manager", m.employee_id "MN#"
from HR.employees e
left outer join HR.employees m
on (e.manager_id = m.employee_id);

Employee	EMP#	Manager	MN#
0zer	168	Cambrault	148
Bloom	169	Cambrault	148
Fox	170	Cambrault	148
Smith	171	Cambrault	148
Bates	172	Cambrault	148
Kumar	173	Cambrault	148
Hunold	103	De Haan	102
Vishney	162	Errazuriz	147
Greene	163	Errazuriz	147
Marvins		Errazuriz	147
Lee	165	Errazuriz	147
Employee	EMP#	Manager	MN#
Ande	166	Errazuriz	147
Banda	167	Errazuriz	147
Bissot	129	Fripp	121
Atkinson	130	Fripp	121
Marlow	131	Fripp	121
Olson		Fripp	121
Sarchand		Fripp	121
Bull	185	Fripp	121
Dellinger		Fripp	121
Cabrio		Fripp	121
Faviet	109	Greenberg	108
Employee	EMP#	Manager	MN#
Chen	110	Greenberg	108
Sciarra	111	Greenberg	108
Urman	112	Greenberg	108
Popp	113	Greenberg	108
Fay	202	Hartstein	201
Gietz	206	Higgins	205
Ernst	104	Hunold	103
Austin	105	Hunold	103
Pataballa	106	Hunold	103
Lorentz	107	Hunold	103
Mallin	133	Kaufling	122

F	EMD#	Marian	NAN 1 //
Employee	EMP#	Manager	MN#
Rogers	134	Kaufling	122
Gee		Kaufling	122
Philtanker	136	Kaufling	122
Chung		Kaufling	122
Dilly		Kaufling	122
Gates		Kaufling	122
Perkins		Kaufling	122
Kochhar		King	100 100
De Haan Raphaely		King King	100
Weiss		King	100
WC133	120	K±116	100
Employee	EMP#	Manager	MN#
Fripp	121	King	100
Kaufling		King	100
Vollman		King	100
Mourgos		King	100
Russell		King	100
Partners		King	100
Errazuriz		King	100
Cambrault		King	100
Zlotkey		King	100
Hartstein		King Kochhar	100
Greenberg	108	Kochnar	101
Employee	EMP#	Manager	MN#
Whalen	200	Kochhar	101
Mavris		Kochhar	101
Baer	204	Kochhar	101
Higgins	205	Kochhar	101
Rajs		Mourgos	124
Davies		Mourgos	124
Matos		Mourgos	124
Vargas		Mourgos	124
Walsh		Mourgos	124 124
Feeney OConnell		Mourgos Mourgos	124
OCOIMETT	150	riour gos	124
Employee		Manager	MN#
Grant		Mourgos	124
King		Partners	146
Sully	157	Partners	146
McEwen	158	Partners	146
Smith	159	Partners	146
Doran		Partners	146
Sewall		Partners	146
Khoo		Raphaely	114
Baida Tobias		Raphaely	114 114
Himuro		Raphaely Raphaely	114 114
Hamai O	110	парпасту	117
Employee	EMP#	Manager	MN#
Colmenares	119	Raphaely	114
Tucker		Russell	145

Bernstein	151	Russell	145
Hall		Russell	145
Olsen			_
		Russell	145
Cambrault	154	Russell	145
Tuvault	155	Russell	145
Ladwig	137	Vollman	123
Stiles		Vollman	123
Seo		Vollman	123
Patel	140	Vollman	123
Employee		Manager	MN#
Bell		Vollman	123
_			
Everett	_	Vollman	123
McCain	194	Vollman	123
Jones	195	Vollman	123
Nayer	125	Weiss	120
Mikkilineni		Weiss	120
Landry		Weiss	120
Markle	128	Weiss	120
Taylor	180	Weiss	120
Fléaur		Weiss	120
Sullivan	182	Weiss	120
Employee	EMD#	Manager	MN#
	LI'II #		1111111
Geoni	183	Weiss	120
Abel		Zlotkey	149
		•	
Hutton		Zlotkey	149
Taylor	176	Zlotkey	149
Livingston	177	Zlotkey	149
Grant	178	Zlotkev	149
Grant Johnson		Zlotkey Zlotkev	149 149
		Zlotkey Zlotkey	
Johnson			
Johnson 106 rows selected.	179	Zlotkey	149
Johnson 106 rows selected. Employee	179 EMP#	Zlotkey Manager	149 MN#
Johnson 106 rows selected.	179 EMP#	Zlotkey	149 MN#
Johnson 106 rows selected. Employee Ozer	EMP#	Zlotkey Manager Cambrault	MN# 148
Johnson 106 rows selected. Employee Ozer Bloom	EMP# 168 169	Zlotkey ManagerCambrault Cambrault	MN# 148 148
Johnson 106 rows selected. Employee Ozer Bloom Fox	EMP# 168 169 170	Manager Cambrault Cambrault Cambrault	MN# 148 148 148
Johnson 106 rows selected. Employee Ozer Bloom	EMP#168 169 170 171	Manager Cambrault Cambrault Cambrault Cambrault Cambrault	MN# 148 148 148 148
Johnson 106 rows selected. Employee Ozer Bloom Fox	EMP#168 169 170 171	Manager Cambrault Cambrault Cambrault	MN# 148 148 148
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates	EMP# 168 169 170 171 172	Manager Cambrault Cambrault Cambrault Cambrault Cambrault	MN# 148 148 148 148 148
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar	EMP# 168 169 170 171 172 173	Manager	MN# 148 148 148 148 148
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold	EMP# 168 169 170 171 172 173 103	Manager	MN# 148 148 148 148 148 148 102
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney	EMP# 168 169 170 171 172 173 103 162	Manager Cambrault De Haan Errazuriz	MN# 148 148 148 148 148 148 148 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold	EMP# 168 169 170 171 172 173 103 162	Manager	MN# 148 148 148 148 148 148 102
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney	EMP#	Manager Cambrault De Haan Errazuriz	MN# 148 148 148 148 148 148 148 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene	EMP#	Manager Cambrault	MN# 148 148 148 148 148 148 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins	EMP#	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Carbrault	MN# 148 148 148 148 148 148 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP#	Manager	MN# 148 148 148 148 148 148 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP#	Manager	MN# 148 148 148 148 148 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP#	Manager	MN# 148 148 148 148 148 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP#	Manager	MN# 148 148 148 148 148 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault De Haan Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz	MN# 148 148 148 148 148 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault De Haan Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Fripp	MN# 148 148 148 148 148 147 147 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot Atkinson	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Embrault Cambrault De Haan Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Fripp Fripp	MN# 148 148 148 148 148 147 147 147 147 147 147 147 147 147 147
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot Atkinson Marlow	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129 130 131	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault De Haan Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Fripp Fripp Fripp	MN# 148 148 148 148 148 147 147 147 147 147 147 147 147 147 121 121 121
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot Atkinson Marlow Olson	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129 130 131	Manager	MN# 148 148 148 148 148 147 147 147 147 147 147 147 121 121 121
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot Atkinson Marlow	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129 130 131	Manager Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault De Haan Errazuriz Errazuriz Errazuriz Errazuriz Errazuriz Fripp Fripp Fripp	MN# 148 148 148 148 148 147 147 147 147 147 147 147 147 147 121 121 121
Johnson 106 rows selected. Employee Ozer Bloom Fox Smith Bates Kumar Hunold Vishney Greene Marvins Lee Employee Ande Banda Bissot Atkinson Marlow Olson	EMP# 168 169 170 171 172 173 103 162 163 164 165 EMP# 166 167 129 130 131 132 184	Manager	MN# 148 148 148 148 148 147 147 147 147 147 147 147 121 121 121

Dellinger	186	Fripp	121
Cabrio		Fripp	121
Faviet		Greenberg	108
raviet	109	dieenberg	100
[mm]ayaa	EMD#	Managan	MAI#
Employee	EMP#	Manager	MN#
Chen		Greenberg	108
Sciarra		Greenberg	108
Urman		Greenberg	108
Popp	113	Greenberg	108
Fay	202	Hartstein	201
Gietz	206	Higgins	205
Ernst	104	Hunold	103
Austin	105	Hunold	103
Pataballa	106	Hunold	103
Lorentz		Hunold	103
Mallin		Kaufling	122
- Idili	133		
Employee	EMD#	Manager	MN#
			122
Rogers		Kaufling	
Gee		Kaufling	122
Philtanker		Kaufling	122
Chung		Kaufling	122
Dilly		Kaufling	122
Gates	190	Kaufling	122
Perkins	191	Kaufling	122
Kochhar	101	King	100
De Haan	102	King	100
Raphaely		King	100
Weiss		King	100
		6	
Employee	FMP#	Manager	MN#
Fripp	121	King	100
Kaufling		King	100
Vollman		King	100
Mourgos		King	100
Russell		King	
			100
Partners		King	100
Errazuriz	14/		100
		King	100
Cambrault	148	King	100
Zlotkey	148 149	King King	100 100
Zlotkey Hartstein	148 149 201	King King King	100 100 100
Zlotkey	148 149 201	King King	100 100
Zlotkey Hartstein	148 149 201	King King King	100 100 100
Zlotkey Hartstein	148 149 201 108	King King King	100 100 100
Zlotkey Hartstein Greenberg	148 149 201 108 EMP#	King King King Kochhar	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP#	King King King Kochhar	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP#	King King King Kochhar Manager	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP# 200 203	King King King Kochhar ManagerKochhar	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer	148 149 201 108 EMP# 200 203 204	King King King Kochhar Manager Kochhar Kochhar	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins	148 149 201 108 EMP# 200 203 204 205	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs	148 149 201 108 EMP# 200 203 204 205 141	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Kochhar Mourgos	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs Davies	148 149 201 108 EMP# 200 203 204 205 141 142	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Kochhar Mourgos Mourgos	100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs Davies Matos	148 149 201 108 EMP# 	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos Mourgos Mourgos	100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP# 200 203 204 205 141 142 143 144	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Kochhar Mourgos Mourgos Mourgos Mourgos Mourgos	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs Davies Matos Vargas Walsh	148 149 201 108 EMP# 200 203 204 205 141 142 143 144 196	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP# 	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos	100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs Davies Matos Vargas Walsh	148 149 201 108 EMP# 	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos	100 100 100 101 MN#
Zlotkey Hartstein Greenberg Employee Whalen Mavris Baer Higgins Rajs Davies Matos Vargas Walsh Feeney OConnell	148 149 201 108 EMP# 200 203 204 205 141 142 143 144 196 197 198	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos	100 100 101 MN#
Zlotkey Hartstein Greenberg Employee	148 149 201 108 EMP# 200 203 204 205 141 142 143 144 196 197 198	King King King Kochhar Manager Kochhar Kochhar Kochhar Kochhar Mourgos	100 100 101 MN#

Grant	199	Mourgos	124
King		Partners	146
Sully		Partners	146
McEwen	_	Partners	146
Smith		Partners	146
Doran		Partners	146
Sewall		Partners	146
Khoo		Raphaely	114
Baida		Raphaely	114
Tobias		Raphaely	114
Himuro		Raphaely	114
Hillian 0	110	Kaphaeiy	114
Employee	EMP#	Manager	MN#
Colmenares		Raphaely	114
Tucker		Russell	145
Bernstein		Russell	145
Hall	152	Russell	145
Olsen	153	Russell	145
Cambrault	154	Russell	145
Tuvault	155	Russell	145
Ladwig	137	Vollman	123
Stiles	138	Vollman	123
Seo	139	Vollman	123
Patel	140	Vollman	123
Employee	EMP#	Manager	MN#
Bell	192	Vollman	123
Everett		Vollman	123
McCain	194	Vollman	123
Jones		Vollman	123
Nayer		Weiss	120
Mikkilineni		Weiss	120
Landry		Weiss	120
Markle	128	Weiss	120
Taylor		Weiss	120
Fleaur		Weiss	120
Sullivan		Weiss	120
Employee		Manager	MN#
Geoni		Weiss	120
Abel		Zlotkey	149
Hutton		Zlotkey	149
Taylor		Zlotkey	149
		Zlotkey	149
Livingston Grant		Zlotkey	
Johnson		•	149
		Zlotkey	149
King	100		

select e.last_name "NAME", e.hire_date "Hire Date"
from HR.employees e, HR.employees davies
where davies.last_name = 'Davies' and davies.hire_date < e.hire_date;</pre>

NAME	III Bala
NAME	Hire Date
Kochhar	21-SEP-05
Hunold	03-JAN-06
	21-MAY-07
Ernst Austin	21-MAY-07 25-JUN-05
Pataballa	05-FEB-06
Lorentz	07-FEB-07
Chen	28-SEP-05
Sciarra	30-SEP-05
Urman	07-MAR-06
Popp	07-DEC-07
Baida	24-DEC-05
NAME	Hire Date
Tobias	24-JUL-05
Himuro	15-NOV-06
Colmenares	10-AUG-07
Fripp	10-APR-05
Vollman	10-0CT-05
Mourgos	16-NOV-07
Nayer	16-JUL-05
Mikkilineni	28-SEP-06
Landry	14-JAN-07
Markle	08-MAR-08
Bissot	20-AUG-05
NAME	Hire Date
Atkinson	30-0CT-05
Marlow	16-FEB-05
Olson	10-APR-07
Rogers	26-AUG-06
Gee	12-DEC-07
Philtanker	06-FEB-08
Stiles	26-0CT-05
Seo	12-FEB-06
Patel	06-APR-06
Matos	15-MAR-06
Vargas	09-JUL-06
NAME	Hire Date
Errazuriz	10-MAR-05
Cambrault	15-0CT-07
Zlotkey	29-JAN-08
Tucker	30-JAN-05
Bernstein	24-MAR-05
Hall	20-AUG-05
Olsen	30-MAR-06
Cambrault	09-DEC-06
Tuvault	23-NOV-07
Smith	10-MAR-05
Doran	15-DEC-05
NAME	Hino Dato
NAME	Hire Date

6 11	02 1101/ 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
0zer	11-MAR-05
Bloom	23-MAR-06
Fox	24-JAN-06
Smith	23-FEB-07
SIIITCII	23-1 Lb-07
NAME	Hire Date
Data -	24 MAR 07
Bates	24-MAR-07
Kumar	21-APR-08
Hutton	19-MAR-05
Taylor	24-MAR-06
Livingston	23-APR-06
Grant	24-MAY-07
Johnson	04-JAN-08
Taylor	24-JAN-06
Fleaur	23-FEB-06
Sullivan	21-JUN-07
Sullivan	21-JUN-07 03-FEB-08 Hire Date
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date
Sullivan Geoni NAME Bull	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05
Sullivan Geoni NAMEBull Dellinger	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06
Sullivan Geoni NAMEBull Dellinger Cabrio	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07
Sullivan Geoni NAMEBull Dellinger Cabrio Chung	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05
Sullivan Geoni NAMEBull Dellinger Cabrio Chung Dilly	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05
Sullivan Geoni NAMEBull Dellinger Cabrio Chung Dilly Gates	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06
Sullivan Geoni NAMEBull Dellinger Cabrio Chung Dilly	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05
Sullivan Geoni NAMEBull Dellinger Cabrio Chung Dilly Gates	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06
Sullivan Geoni NAME Bull Dellinger Cabrio Chung Dilly Gates Perkins	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07
Sullivan Geoni NAME Bull Dellinger Cabrio Chung Dilly Gates Perkins Everett	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07 03-MAR-05
Sullivan Geoni NAMEBull Dellinger Cabrio Chung Dilly Gates Perkins Everett McCain	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07 03-MAR-05 01-JUL-06
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07 03-MAR-05 01-JUL-06 17-MAR-07 24-APR-06
Sullivan Geoni NAME Bull Dellinger Cabrio Chung Dilly Gates Perkins Everett McCain Jones	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07 03-MAR-05 01-JUL-06 17-MAR-07
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date 20-FEB-05 24-JUN-06 07-FEB-07 14-JUN-05 13-AUG-05 11-JUL-06 19-DEC-07 03-MAR-05 01-JUL-06 17-MAR-07 24-APR-06 Hire Date
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date
Sullivan Geoni NAME	21-JUN-07 03-FEB-08 Hire Date

select e.last_name "Employee", e.hire_date "Emp Hired", m.last_name "Manager",
m.hire_date "Mgr Hired"
from HR.employees e, HR.employees m
where e.manager_id = m.employee_id and e.hire_date < m.hire_date;</pre>

Employee	Emp Hired	Manager	Mgr Hired
De Haan Raphaely Kaufling Greenberg	13-JAN-01 07-DEC-02 01-MAY-03 17-AUG-02	King King	17-JUN-03 17-JUN-03 17-JUN-03 21-SEP-05

Whalen Mavris Baer Higgins Austin Faviet Marlow	17-SEP-03 07-JUN-02 07-JUN-02 07-JUN-02 25-JUN-05 16-AUG-02 16-FEB-05	Kochhar Kochhar Kochhar Hunold Greenberg	21-SEP-05 21-SEP-05 21-SEP-05 21-SEP-05 03-JAN-06 17-AUG-02 10-APR-05
Employee	Emp Hired	Manager	Mgr Hired
Sarchand Bull Ladwig Bell Everett Rajs Davies Matos Vargas Walsh Feeney	27-JAN-04 20-FEB-05 14-JUL-03 04-FEB-04 03-MAR-05 17-OCT-03 29-JAN-05 15-MAR-06 09-JUL-06 24-APR-06	Fripp Vollman Vollman Vollman Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos Mourgos	10-APR-05 10-APR-05 10-OCT-05 10-OCT-05 10-OCT-05 16-NOV-07 16-NOV-07 16-NOV-07 16-NOV-07
Employee	Emp Hired	Manager	Mgr Hired
OConnell King Sully McEwen Ozer Bloom Fox Smith Bates Abel Hutton	23-MAR-06 24-JAN-06 23-FEB-07	Partners Partners Partners Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault Cambrault	16-NOV-07 05-JAN-05 05-JAN-05 05-JAN-05 15-OCT-07 15-OCT-07 15-OCT-07 15-OCT-07 29-JAN-08
Employee	Emp Hired	Manager	Mgr Hired
Taylor Livingston Grant Johnson	24-MAR-06 23-APR-06 24-MAY-07 04-JAN-08	Zlotkey Zlotkey	29-JAN-08 29-JAN-08 29-JAN-08 29-JAN-08

CREATE OR REPLACE VIEW employees_vu AS
select employee_id, last_name employee, department_id
from HR.employees;

View EMPLOYEES_VU created.

select * from employees_vu;

EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_	_ID
100	King		90
	Kochhar		90
102	De Haan		90
103	Hunold		60
104	Ernst		60
105	Austin		60

106	Pataballa	60
	Lorentz	60
	Greenberg	100
	Faviet	100
110	Chen	100
EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
111	Sciarra	100
	Urman	100
	Popp	100
	Raphaely	30
	Khoo	30
	Baida	30
	Tobias	30
	Himuro	30
_	Colmenares	30
	Weiss	50
_	Fripp	50
121	11 199	50
EMPLOYEE ID	EMPLOYEE	DEPARTMENT_ID
122	Kaufling	50
123	Vollman	50
124	Mourgos	50
	Nayer	50
	Mikkilineni	50
127	Landry	50
128	Markle	50
129	Bissot	50
130	Atkinson	50
131	Marlow	50
		50
132	Olson	50
		50
	Olson EMPLOYEE	
EMPLOYEE_ID	EMPLOYEE	50 DEPARTMENT_ID
EMPLOYEE_ID	EMPLOYEE Mallin	DEPARTMENT_ID
EMPLOYEE_ID 133 134	EMPLOYEE	DEPARTMENT_ID 50 50 50
EMPLOYEE_ID 133 134 135	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50
EMPLOYEE_ID 	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50
EMPLOYEE_ID 	EMPLOYEE	50 DEPARTMENT_ID
133 134 135 136 137 138	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50
133 134 135 136 137 138 139	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50
133 134 135 136 137 138 139	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141	EMPLOYEE	50 DEPARTMENT_ID
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142	EMPLOYEE	50 DEPARTMENT_ID
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50
133 134 135 136 137 138 139 140 141 142 143	EMPLOYEE	50 DEPARTMENT_ID
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146 147	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146 147 148	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146 147 148 149	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146 147 148 149 150	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 50
EMPLOYEE_ID 133 134 135 136 137 138 139 140 141 142 143 EMPLOYEE_ID 144 145 146 147 148 149 150 151	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 60 80 80 80 80 80 80 80 80
EMPLOYEE_ID	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 80 80 80 80 80 80 80 80 80
EMPLOYEE_ID	EMPLOYEE	50 DEPARTMENT_ID 50 50 50 50 50 50 50 50 50 50 50 50 60 80 80 80 80 80 80 80 80

EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
	Tuvault	80
	King	80
	Sully McEwen	80 80
	Smith	80
	Doran	80
	Sewall	80
162	Vishney	80
163	Greene	80
164	Marvins	80
165	Lee	80
EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
166	Ande	80
	Banda	80
	Ozer	80
169	Bloom	80
	Fox	80
	Smith	80
	Bates	80
	Kumar	80
	Abel	80
	Hutton	80 80
170	Taylor	80
EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
177	Livingston	80
	Grant	00
_	Johnson	80
	Taylor	50
	Fleaur	50
182	Sullivan	50
183	Geoni	50
	Sarchand	50
	Bull	50
	Dellinger	50
187	Cabrio	50
EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
	Chung	50
	Dilly	50
	Gates	50
191	Perkins	50
192	Bell	50
	Everett	50
	McCain	50
	Jones	50
	Walsh	50
	Feeney	50
198	OConnel1	50
EMPLOYEE_ID	EMPLOYEE	DEPARTMENT_ID
100	Grant	50
	Whalen	10
200		10

201 Hartstein	20
202 Fay	20
203 Mavris	40
204 Baer	70
205 Higgins	110
206 Gietz	110

set long 600
SELECT view_name, text
FROM user_views;
VIEW_NAME
TEXT

DEPT50

select employee_id "EMPNO", last_name "EMPLOYEE", department_id "DEPTNO"

from HR.employees

where department_id = '50'

with check option

EMPLOYEES_VU

select employee_id, last_name employee, department_id

from HR.employees

select employee, department_id from employees_vu;

Kochhar 90 De Haan 90 Hunold 60 Ernst 60 Austin 60 Pataballa 60 Lorentz 60 Greenberg 100 Faviet 100	EMPLOYEE	DEPARTMENT_ID
	King Kochhar De Haan Hunold Ernst Austin Pataballa Lorentz Greenberg	90 90 90 60 60 60 60
		100

EMPLOYEE	DEPARTMENT_ID
Sciarra	100
Urman	100
Popp	100
Raphaely	30
Khoo	30
Baida	30
Tobias	30
Himuro	30
Colmenares	30
Weiss	50

Fripp	50

EMPLOYEE	DEPARTMENT_ID
Kaufling Vollman Mourgos Nayer Mikkilineni Landry Markle Bissot Atkinson	50 50 50 50 50 50 50 50
Marlow Olson	50 50
EMPLOYEE	DEPARTMENT_ID
Mallin Rogers Gee Philtanker Ladwig Stiles Seo Patel Rajs Davies Matos	50 50 50 50 50 50 50 50
EMPLOYEE	DEPARTMENT_ID
Vargas Russell Partners Errazuriz Cambrault Zlotkey Tucker Bernstein Hall Olsen Cambrault	50 80 80 80 80 80 80 80 80
EMPLOYEE	DEPARTMENT_ID
Tuvault King Sully McEwen Smith Doran Sewall Vishney Greene Marvins Lee	80 80 80 80 80 80 80 80 80
EMPLOYEE	DEPARTMENT_ID
Ande	80

Banda	80	
0zer	80	
Bloom	80	
Fox	80	
Smith	80	
Bates	80	
Kumar	80	
Abel	80	
Hutton	80	
Taylor	80	
. 4, 20.		
EMPLOYEE	DEPARTMENT_ID	
Livingston Grant	80	
	90	
Johnson	80	
Taylor	50	
Fleaur	50	
Sullivan	50	
Geoni	50	
Sarchand	50	
Bull	50	
Dellinger	50	
Cabrio	50	
EMPLOYEE	DEPARTMENT_ID	
Chung	50	
Dilly	50	
Gates	50	
Perkins	50	
Bell	50	
Everett	50	
McCain	50	
Jones	50	
Walsh	50	
Feeney	50	
OConnell	50	
oconneri	50	
EMPLOYEE	DEPARTMENT_ID	
Grant	50	
Whalen	10	
Hartstein	20	
Fay	20	
Mavris	40	
Baer	70	
Higgins	110	
Gietz	110	
3232		
107 rows selected.		
CREATE VIEW DEPT50 AS		
select employee_id "EMPNO	". last name "FMPLOYFF".	department id "DFPTNO"
from HR.employees	,,	
where department_id = 50;		
miere deparement_id = 30;		
Error starting at line :	66 in command -	
CREATE VIEW DEPT50 AS	OO III COMMIAIIU -	
		demandant 24 UDEDINGU
select employee_id "EMPNO	, rast_name "EMPLOYEE",	uepartment_id "DEPINO"

from HR.employees where department_id = 50 Error report -ORA-00955: name is already used by an existing object 00955. 00000 - "name is already used by an existing object" *Cause: *Action:

DESCRIBE DEPT50 select *

from DEPT50;

Name	Null	L?	Туре
EMPNO EMPLOYEE			NUMBER(6) VARCHAR2(25)
DEPTNO			NUMBER(4)

EMPNO	EMPLOYEE	DEPTNO
120	Weiss	50
_	Fripp	50
	Kaufling	50
	Vollman	50
	Mourgos	50
	Nayer	50
	Mikkilineni	50
	Landry	50
	Markle	50
129	Bissot	50
130	Atkinson	50
	EMPLOYEE	DEPTNO
121	Manla	
_	Marlow Olson	50 50
_	Mallin	50
	Rogers	50
	Gee	50
	Philtanker	50
	Ladwig	50
	Stiles	50
	Seo	50
	Patel	50
141	Rajs	50
EMDNO	EMPLOYEE	DEPTNO
LITINO		DEFINO
142	Davies	50
143	Matos	50
144	Vargas	50
	Taylor	50
181	Fleaur	50
182	Sullivan	50
	Geoni	50
	Sarchand	50
	Bull	50
	Dellinger	50
187	Cabrio	50

```
EMPNO EMPLOYEE
                                        DEPTNO
      188 Chung
      189 Dilly
                                            50
      190 Gates
                                            50
      191 Perkins
                                            50
      192 Bell
                                            50
      193 Everett
                                            50
      194 McCain
                                            50
      195 Jones
                                            50
      196 Walsh
                                            50
      197 Feeney
                                            50
       198 OConnell
                                            50
    EMPNO EMPLOYEE
                                        DEPTNO
______ ____
      199 Grant
                                            50
45 rows selected.
select view name, text
from user_views;
VIEW NAME
TEXT
DEPT50
select employee_id "EMPNO", last_name "EMPLOYEE", department_id "DEPTNO"
from HR.employees
where department_id = '50'
with check option
EMPLOYEES VU
select employee_id, last_name employee, department_id
from HR.employees
update DEPT50
set deptno = 80
where employee = 'Matos';
Error starting at line : 78 in command -
update DEPT50
set deptno = 80
where employee = 'Matos'
Error at Command Line: 78 Column: 8
Error report -
SQL Error: ORA-01031: insufficient privileges
01031. 00000 - "insufficient privileges"
*Cause:
          An attempt was made to perform a database operation without
          the necessary privileges.
          Ask your database administrator or designated security
*Action:
           administrator to grant you the necessary privileges
```