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23K-0074  
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Database Lab - Lab 01  
In-Lab & Post-Lab Tasks

Q1)

Worksheet: Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE NOT DEPARTMENT_ID=100;
```

Query Result: All Rows Fetched: 100 in 0.006 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
3	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	90
4	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102	60
5	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103	60
6	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
7	Valli	Pataballa	VPATABALL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
8	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
9	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
10	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
11	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
12	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
13	Guy	Himuro	GHIIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
14	Karen	Colmenares	KCOLMENAS	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
15	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
16	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
17	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
18	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
19	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
20	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
21	Irene	Mikkilineni	IMIKKILIN	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
22	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
23	Steven	Mackie	SMACKIE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50
24	Laura	Bisot	LBISOT	650.124.5234	20-AUG-05	ST_CLERK	3800	(null)	121	50
25	Moche	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50
26	James	Marlow	JMARLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
27	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121	50
28	Jason	Mallin	JMALLIN	650.127.1934	14-JUN-04	ST_CLERK	3300	(null)	122	50
29	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122	50
30	KI	Gee	KGEE	650.127.1734	12-DEC-07	ST_CLERK	2400	(null)	122	50
31	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122	50
32	Renske	Ladwig	RLADWIG	650.121.1234	14-JUL-03	ST_CLERK	3600	(null)	123	50
33	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123	50
34	John	Seo	JSEO	650.121.2019	12-FEB-06	ST_CLERK	2700	(null)	123	50

Q2)

Worksheet: Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY = 10000 OR SALARY = 12000 OR SALARY = 15000;
```

Query Result: All Rows Fetched: 5 in 0.001 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
2	Peter	Tucker	PTUCKER	011.44.1344.129268	30-JAN-05	SA_REP	10000	0.35	145	80
3	Janette	King	JKING	011.44.1345.429268	30-JAN-04	SA_REP	10000	0.35	146	80
4	Harrison	Bloom	HBLOOM	011.44.1343.829268	23-MAR-06	SA_REP	10000	0.2	148	80
5	Hermann	Beer	HBAER	515.123.8888	07-JUN-02	PR_REP	10000	(null)	101	70

Q3)

Worksheet: Query Builder

```
SELECT FIRST_NAME, SALARY
FROM EMPLOYEES
WHERE SALARY <= 25000;
```

Script Output: All Rows Fetched: 107 in 0.008 seconds

FIRST_NAME	SALARY
Steven	24000
Neena	17000
Lex	17000
Alexander	9000
Bruce	6000
David	4800
Valli	4800
Diana	4200
Nancy	12008
Daniel	9000
John	8200
Ismael	7700
Jose Manuel	7800
Luis	6900
Den	11000
Alexander	3100
Shelli	2900
Sigal	2800
Guy	2600
Karen	2500
Matthew	8000
Adam	8200
Payam	7900
Shanta	6500
Kevin	5800
Julia	3200
Irene	2700
James	2400
Steven	2200
Laura	3300
Moche	2800

Q4)

Query Builder

```
SELECT *  
FROM EMPLOYEES  
WHERE NOT DEPARTMENT_ID = 60;
```

Query Result

All Rows Fetched: 101 in 0.005 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	Weena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
3	Lex	De Haan	LOEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	90
4	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	100
5	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	100
6	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
7	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
8	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
9	Luis	Popp	LPOPP	515.124.4567	07-DEC-02	FI_ACCOUNT	6900	(null)	108	100
10	Den	Raphaely	DRAPHAEL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
11	Alexander	Rhoo	ARHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
12	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
13	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
14	Guy	Himuro	GHIIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
15	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
16	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
17	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
18	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
19	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
20	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
21	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
22	Irene	Mikkilineni	MIKKILINI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
23	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
24	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50
25	Laura	Bissot	LBISSOT	650.124.5234	20-AUG-05	ST_CLERK	3300	(null)	121	50
26	Mohe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50
27	James	Marlow	JMARLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
28	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121	50
29	Jason	Mallin	JMALLIN	650.127.1934	14-JUN-04	ST_CLERK	3300	(null)	122	50
30	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122	50
31	KI	Gee	KGEE	650.127.1734	12-DEC-07	ST_CLERK	2400	(null)	122	50
32	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122	50
33	Benske	Ladwig	RLADWIG	650.121.1234	14-JUL-03	ST_CLERK	3600	(null)	123	50
34	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123	50

Q5)

Query Builder

```
SELECT *  
FROM EMPLOYEES  
WHERE DEPARTMENT_ID BETWEEN 60 AND 80;
```

Query Result

All Rows Fetched: 40 in 0.006 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
7	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
8	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
9	Gerald	Cambraut	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100	80
10	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	80
11	Peter	Tucker	PTUCKER	011.44.1344.129268	30-JAN-05	SA_REP	10000	0.3	145	80
12	David	Bernstein	DBERNSTE	011.44.1344.345268	24-MAR-05	SA_REP	9500	0.25	145	80
13	Peter	Hall	PHALL	011.44.1344.478968	20-AUG-05	SA_REP	9000	0.25	145	80
14	Christopher	Olsen	COlsen	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145	80
15	Nanette	Cambraut	NCAMBRAU	011.44.1344.997668	09-DEC-06	SA_REP	7500	0.2	145	80
16	Oliver	Tuvault	OTUVAULT	011.44.1344.496508	23-NOV-07	SA_REP	7000	0.15	145	80
17	Janette	King	JKING	011.44.1345.429268	30-JAN-04	SA_REP	10000	0.35	146	80
18	Patrick	Sully	PSULLY	011.44.1345.929268	04-MAR-04	SA_REP	9500	0.35	146	80
19	Allan	McEwen	AMCEWEN	011.44.1345.829268	01-AUG-04	SA_REP	9000	0.35	146	80
20	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-05	SA_REP	8000	0.3	146	80
21	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146	80
22	Srath	Sevalli	SSEVALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	80
23	Clara	Vishney	CVISHNEY	011.44.1346.129268	11-NOV-05	SA_REP	10500	0.25	147	80
24	Danielle	Greene	DGREENE	011.44.1346.229268	19-MAR-07	SA_REP	9500	0.15	147	80
25	Mattea	Marvins	MMARVINS	011.44.1346.329268	24-JAN-08	SA_REP	7200	0.1	147	80
26	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6800	0.1	147	80
27	Sunder	Ande	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	80
28	Amit	Banda	ABANDA	011.44.1346.729268	21-APR-08	SA_REP	6200	0.1	147	80
29	Lisa	Ozer	LOZER	011.44.1343.929268	11-MAR-05	SA_REP	11500	0.25	148	80
30	Harrison	Bloom	HBLOOM	011.44.1343.829268	23-MAR-06	SA_REP	10000	0.2	148	80
31	Taylor	Fox	TFox	011.44.1343.729268	24-JAN-06	SA_REP	9600	0.2	148	80
32	William	Smith	WSMITH	011.44.1343.629268	23-FEB-07	SA_REP	7400	0.15	148	80
33	Elizabeth	Bates	EBATES	011.44.1343.529268	24-MAR-07	SA_REP	7300	0.15	148	80
34	Sundita	Kumar	SKUMAR	011.44.1343.329268	21-APR-08	SA_REP	6100	0.1	148	80
35	Ellen	Abel	EABEL	011.44.1644.429267	11-MAY-04	SA_REP	11000	0.3	149	80
36	Alyssa	Button	ABUTTON	011.44.1644.429266	19-MAR-05	SA_REP	8800	0.25	149	80
37	Jonathon	Taylor	JTAYLOR	011.44.1644.429265	24-MAR-06	SA_REP	8600	0.2	149	80
38	Jack	Livingston	JLIVINGS	011.44.1644.429264	23-APR-06	SA_REP	8400	0.2	149	80
39	Charles	Johnson	CJOHNSON	011.44.1644.429262	04-JAN-08	SA_REP	6200	0.1	149	80
40	Hermann	Baer	HBAER	515.123.8888	07-JUN-02	PR_REP	10000	(null)	101	70

Q6)

The screenshot shows the SQL Developer interface with a query window titled 'hr'. The query entered is:

```
SELECT *
FROM DEPARTMENTS;
```

The query result is displayed in a table with the following columns: DEPARTMENT\_ID, DEPARTMENT\_NAME, MANAGER\_ID, and LOCATION\_ID. The table contains 27 rows of data.

DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
1	10 Administration	200	1700
2	20 Marketing	201	1800
3	30 Purchasing	114	1700
4	40 Human Resources	203	2400
5	50 Shipping	121	1500
6	60 IT	103	1400
7	70 Public Relations	204	2700
8	80 Sales	145	2500
9	90 Executive	100	1700
10	100 Finance	108	1700
11	110 Accounting	205	1700
12	120 Treasury	(null)	1700
13	130 Corporate Tax	(null)	1700
14	140 Control And Credit	(null)	1700
15	150 Shareholder Services	(null)	1700
16	160 Benefits	(null)	1700
17	170 Manufacturing	(null)	1700
18	180 Construction	(null)	1700
19	190 Contracting	(null)	1700
20	200 Operations	(null)	1700
21	210 IT Support	(null)	1700
22	220 NOC	(null)	1700
23	230 IT Helpdesk	(null)	1700
24	240 Government Sales	(null)	1700
25	250 Retail Sales	(null)	1700
26	260 Recruiting	(null)	1700
27	270 Payroll	(null)	1700

Q7)

The screenshot shows the SQL Developer interface with a query window titled 'hr'. The query entered is:

```
SELECT *
FROM EMPLOYEES
WHERE FIRST_NAME='Steven';
```

The query result is displayed in a table with the following columns: EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, EMAIL, PHONE\_NUMBER, HIRE\_DATE, JOB\_ID, SALARY, COMMISSION\_PCT, MANAGER\_ID, and DEPARTMENT\_ID. The table contains 2 rows of data.

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	100 Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	120 Steven	Markle	SMARKLE	650.124.1434	08-MAR-05	ST_CLERK	2200	(null)	120	50

Q8)

Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY BETWEEN 15000 AND 25000
AND DEPARTMENT_ID = 50;
```

Query Result

All Rows Fetched: 0 in 0.006 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
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Q9)

Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY < ANY (SELECT SALARY
FROM EMPLOYEES
WHERE DEPARTMENT_ID = 100);
```

Query Result

50 rows fetched in 0.004 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121	50
2	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50
3	Bazel	Philtanker	HPHILIAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122	50
4	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
5	Ki	Gee	KGEE	650.127.1734	12-DEC-07	ST_CLERK	2400	(null)	122	50
6	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
7	James	Marlow	JMARLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
8	Joshua	Patel	JPADEL	650.121.1834	06-APR-06	ST_CLERK	2500	(null)	123	50
9	Peter	Vargas	PVARGAS	650.121.2004	09-JUL-06	ST_CLERK	2500	(null)	124	50
10	Martha	Sullivan	MSULLIVA	650.507.9878	21-JUN-07	SH_CLERK	2500	(null)	120	50
11	Randall	Perkins	RPERKINS	650.505.4876	19-DEC-07	SH_CLERK	2500	(null)	122	50
12	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
13	Randall	Matos	RMATOS	650.121.2874	15-MAR-06	ST_CLERK	2600	(null)	124	50
14	Donald	OConnell	DOCONNEL	650.507.9833	21-JUN-07	SH_CLERK	2600	(null)	124	50
15	Douglas	Grant	DGRANT	650.507.9844	13-JAN-08	SH_CLERK	2600	(null)	124	50
16	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
17	John	Seo	JSEO	650.121.2019	12-FEB-06	ST_CLERK	2700	(null)	123	50
18	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
19	Moshe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50
20	Girard	Geoni	GGEONI	650.507.9879	03-FEB-08	SH_CLERK	2800	(null)	120	50
21	Vance	Jones	VJONES	650.501.4876	17-MAR-07	SH_CLERK	2800	(null)	123	50
22	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
23	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122	50
24	Timothy	Gates	TGATES	650.505.3876	11-JUL-06	SH_CLERK	2900	(null)	122	50
25	Anthony	Cabrio	ACABRIO	650.509.4876	07-FEB-07	SH_CLERK	3000	(null)	121	50
26	Kevin	Feeney	KFEENEY	650.507.9822	23-MAY-06	SH_CLERK	3000	(null)	124	50
27	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
28	Curtis	Davies	CDAVIES	650.121.2994	29-JAN-05	ST_CLERK	3100	(null)	124	50
29	Jean	Fleaur	JFLEAUR	650.507.9877	23-FEB-06	SH_CLERK	3100	(null)	120	50
30	Alana	Walsh	AWALSH	650.507.9811	24-APR-06	SH_CLERK	3100	(null)	124	50
31	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
32	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123	50
33	Ninston	Taylor	NTAYLOR	650.507.9876	24-JAN-06	SH_CLERK	3200	(null)	120	50

Q10)

Query Builder

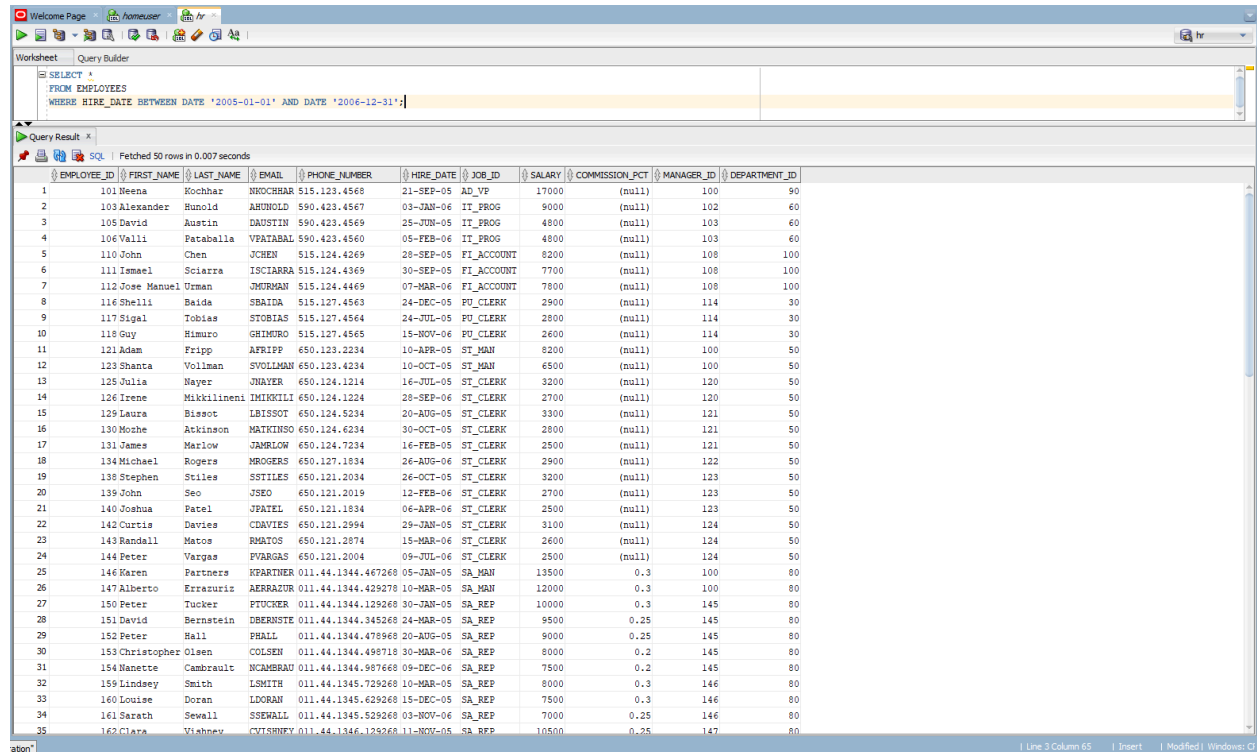
```
SELECT *
FROM EMPLOYEES E
WHERE DEPARTMENT_ID IN (
SELECT DEPARTMENT_ID
FROM EMPLOYEES
GROUP BY DEPARTMENT_ID
HAVING COUNT(*) = 1
);
```

Query Result

All Rows Fetched: 3 in 0.009 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
203	Susan	Mavris	SMAVRIS	515.123.7777	07-JUN-02	HR_REP	6500	(null)	101	40
200	Jennifer	Whalen	JWHALEN	515.123.4444	17-SEP-03	AD_ASST	4400	(null)	101	10
204	Hermann	Beer	HBAER	515.123.8088	07-JUN-02	PR_REP	10000	(null)	101	70

Q11)



Query Builder

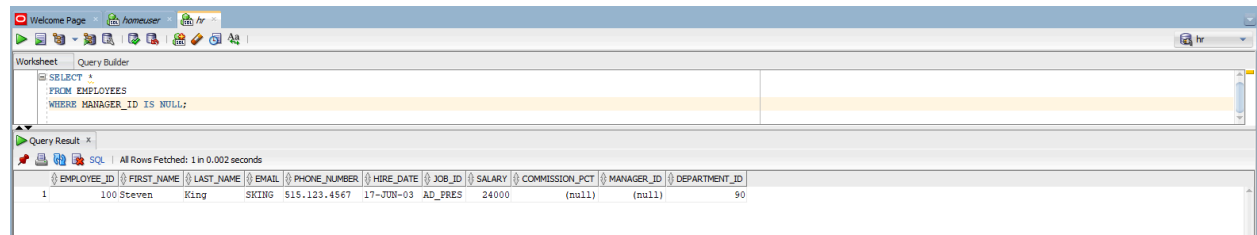
```
SELECT *
FROM EMPLOYEES
WHERE HIRE_DATE BETWEEN DATE '2005-01-01' AND DATE '2006-12-31';
```

Query Result

SQL | Fetched 50 rows in 0.007 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
2	103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102	60
3	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
4	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
5	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
6	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
7	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
8	116	Shelli	Baids	SBAIDS	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
9	117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
10	118	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
11	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
12	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
13	125	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
14	126	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
15	129	Laura	Bisot	LBISSOT	650.124.5234	20-AUG-05	ST_CLERK	3300	(null)	121	50
16	130	Mohe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50
17	131	James	Marlow	JAMLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
18	134	Michael	Rogers	MR ROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122	50
19	138	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123	50
20	139	John	Seo	JSEO	650.121.2019	12-FEB-06	ST_CLERK	2700	(null)	123	50
21	140	Joshua	Patel	JPA TEL	650.121.1834	06-APR-06	ST_CLERK	2500	(null)	123	50
22	142	Curtis	Davies	CDAVIES	650.121.2594	29-JAN-05	ST_CLERK	3100	(null)	124	50
23	143	Randall	Matos	RMATOS	650.121.2874	15-MAR-06	ST_CLERK	2600	(null)	124	50
24	144	Peter	Vargas	PVARGAS	650.121.2004	09-JUL-06	ST_CLERK	2500	(null)	124	50
25	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
26	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
27	150	Peter	Tucker	PTUCKER	011.44.1344.129268	30-JAN-05	SA_REP	10000	0.3	145	80
28	151	David	Bernstein	DBERNSTE	011.44.1344.345268	24-MAR-05	SA_REP	9500	0.25	145	80
29	152	Peter	Hall	PHALL	011.44.1344.478968	20-AUG-05	SA_REP	9000	0.25	145	80
30	153	Christopher	Olsen	COLSEN	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145	80
31	154	Nanette	Cambraut	NCAMBRAU	011.44.1344.987668	09-DEC-06	SA_REP	7500	0.2	145	80
32	159	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-05	SA_REP	8000	0.3	146	80
33	160	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146	80
34	161	Sarah	Sewall	SSEWALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	80
35	162	Clara	Vishnev	CVISHNEV	011.44.1346.129268	11-NOV-05	SA_REP	10500	0.25	147	80

Q12)



Query Builder

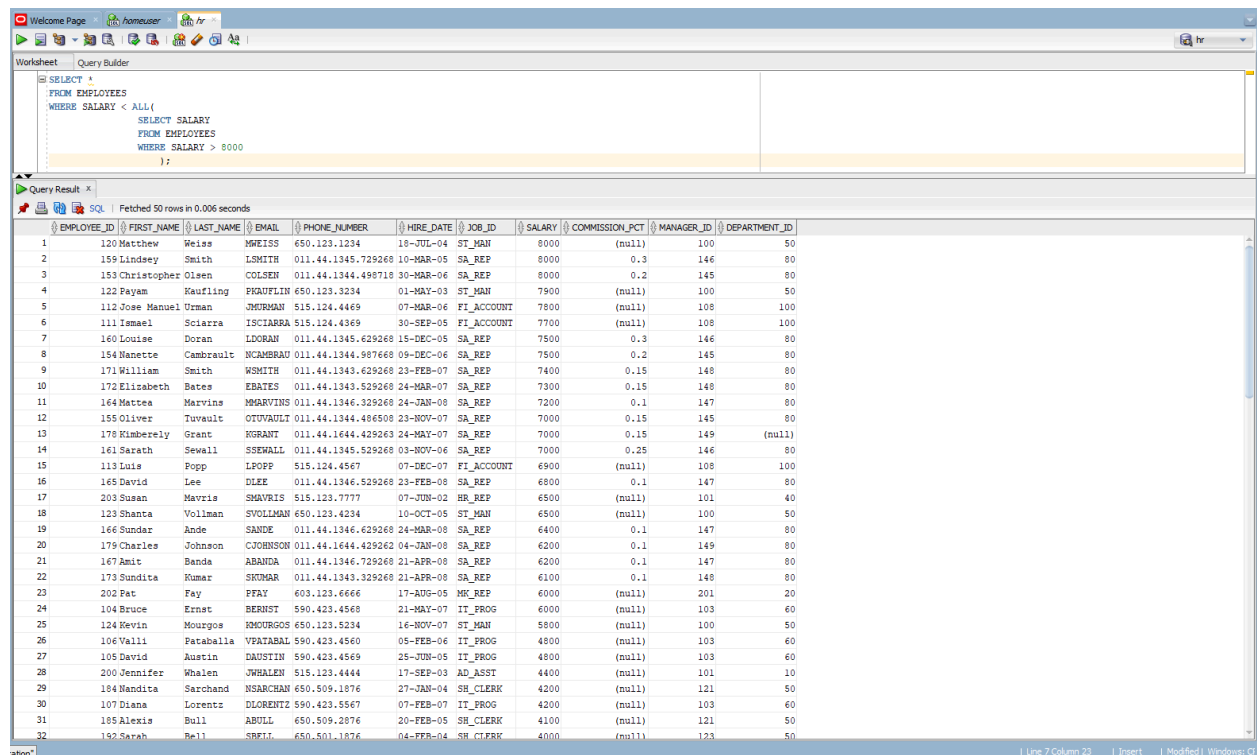
```
SELECT *
FROM EMPLOYEES
WHERE MANAGER_ID IS NULL;
```

Query Result

SQL | All Rows Fetched: 1 in 0.002 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90

Q13)



Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY < ALL(
    SELECT SALARY
    FROM EMPLOYEES
    WHERE SALARY > 8000
);
```

Query Result

SQL | Fetched 50 rows in 0.006 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
2	159	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-05	SA_REP	8000	0.3	146	80
3	153	Christopher	Olsen	COLSEN	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145	80
4	122	Payam	Kaufling	PKAUFING	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
5	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
6	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
7	160	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146	80
8	154	Nanette	Cambraut	NCAMBRAU	011.44.1344.987668	09-DEC-06	SA_REP	7500	0.2	145	80
9	171	William	Smith	WSMITH	011.44.1343.629268	23-FEB-07	SA_REP	7400	0.15	148	80
10	172	Elizabeth	Bates	EBATES	011.44.1343.329268	24-MAR-07	SA_REP	7300	0.15	148	80
11	164	Mattea	Marvins	MMARVINS	011.44.1346.329268	24-JAN-08	SA_REP	7200	0.1	147	80
12	155	Oliver	Tuvault	OTUVAULT	011.44.1344.486508	23-NOV-07	SA_REP	7000	0.15	145	80
13	178	Kimberely	Grant	KGRANT	011.44.1644.429263	24-MAY-07	SA_REP	7000	0.15	149	(null)
14	161	Sarah	Sewall	SSEWALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	80
15	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	100
16	165	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6800	0.1	147	80
17	203	Susan	Mavris	SMAVRIS	515.123.7777	07-JUN-02	HR_REP	6500	(null)	101	40
18	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
19	166	Sundar	Ade	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	80
20	179	Charles	Johnson	CJOHNSON	011.44.1644.429262	04-JAN-08	SA_REP	6200	0.1	149	80
21	167	Amit	Banda	ABANDA	011.44.1346.729268	21-APR-08	SA_REP	6200	0.1	147	80
22	173	Sundita	Kumar	SKUMAR	011.44.1343.329268	21-APR-08	SA_REP	6100	0.1	148	80
23	202	Pat	Fay	PFAY	603.123.6666	17-AUG-05	MK_REP	6000	(null)	201	20
24	104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103	60
25	124	Kevin	Mourgos	KMORGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
26	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
27	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
28	200	Jennifer	Whalen	JWHALEN	515.123.4444	17-SEP-03	AD_ASST	4400	(null)	101	10
29	184	Nandita	Sarchand	NSARCHAN	650.509.1876	27-JAN-04	SH_CLERK	4200	(null)	121	50
30	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
31	185	Alexis	Bull	ABULL	650.509.2876	20-FEB-05	SH_CLERK	4100	(null)	121	50
32	192	Sarah	Bel	SBEIL	650.501.1876	04-FEB-04	SH_CLERK	4000	(null)	123	50

Q14)

Worksheet Query Builder

```

SELECT *
FROM EMPLOYEES
WHERE SALARY > ANY(
    SELECT SALARY
    FROM EMPLOYEES
    WHERE DEPARTMENT_ID=90
);

```

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.008 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID	
1	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90

Q15)

Worksheet Query Builder

```

SELECT *
FROM DEPARTMENTS D
WHERE EXISTS (SELECT 1
    FROM EMPLOYEES E
    WHERE E.DEPARTMENT_ID = D.DEPARTMENT_ID);

```

Query Result x

SQL | All Rows Fetched: 11 in 0.009 seconds

DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
1	10 Administration	200	1700
2	20 Marketing	201	1800
3	30 Purchasing	114	1700
4	40 Human Resources	203	2400
5	50 Shipping	121	1500
6	60 IT	103	1400
7	70 Public Relations	204	2700
8	80 Sales	145	2500
9	90 Executive	100	1700
10	100 Finance	108	1700
11	110 Accounting	205	1700

Q16)

Worksheet Query Builder

```

SELECT *
FROM DEPARTMENTS D
WHERE NOT EXISTS (SELECT 1
    FROM EMPLOYEES E
    WHERE E.DEPARTMENT_ID = D.DEPARTMENT_ID);

```

Query Result x

SQL | All Rows Fetched: 16 in 0.003 seconds

DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
1	120 Treasury	(null)	1700
2	130 Corporate Tax	(null)	1700
3	140 Control And Credit	(null)	1700
4	150 Shareholder Services	(null)	1700
5	160 Benefits	(null)	1700
6	170 Manufacturing	(null)	1700
7	180 Construction	(null)	1700
8	190 Contracting	(null)	1700
9	200 Operations	(null)	1700
10	210 IT Support	(null)	1700
11	220 MOC	(null)	1700
12	230 IT Helpdesk	(null)	1700
13	240 Government Sales	(null)	1700
14	250 Retail Sales	(null)	1700
15	260 Recruiting	(null)	1700
16	270 Payroll	(null)	1700

Q17)

Welcome Page | hr

Worksheet | Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY NOT BETWEEN 5000 AND 15000;
```

Query Result | All Rows Fetched: 52 in 0.005 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	101	Wena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	90
3	102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	90
4	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
5	106	Valli	Patella	VPAITABA	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
6	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
7	115	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
8	116	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
9	117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
10	118	Guy	Himuro	GHIIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
11	119	Karen	Colmenares	KCOLMENAR	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
12	125	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
13	126	Irene	Mikkilineni	IMIKKILIN	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
14	127	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
15	128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50
16	129	Leura	Bissot	LBISSOT	650.124.5234	20-AUG-05	ST_CLERK	3300	(null)	121	50
17	130	Moche	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50
18	131	James	Marlow	JMARLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121	50
19	132	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121	50
20	133	Jason	Mallin	JMALLIN	650.127.1934	14-JUN-04	ST_CLERK	3300	(null)	122	50
21	134	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122	50
22	135	Ki	Gee	KGEE	650.127.1734	12-DEC-07	ST_CLERK	2400	(null)	122	50
23	136	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122	50
24	137	Renske	Ladwig	RLADWIG	650.121.1234	14-JUL-03	ST_CLERK	3600	(null)	123	50
25	138	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123	50
26	139	John	Seo	JSEO	650.121.2019	12-FEB-06	ST_CLERK	2700	(null)	123	50
27	140	Joshua	Patel	JPADEL	650.121.1834	06-APR-06	ST_CLERK	2500	(null)	123	50
28	141	Trenna	Rajs	TRAJS	650.121.8009	17-OCT-03	ST_CLERK	3500	(null)	124	50
29	142	Curtis	Davies	CDAVIES	650.121.2994	29-JAN-05	ST_CLERK	3100	(null)	124	50
30	143	Randall	Matos	RMATOS	650.121.2874	15-MAR-06	ST_CLERK	2600	(null)	124	50
31	144	Peter	Vargas	PVARGAS	650.121.2004	09-JUL-06	ST_CLERK	2500	(null)	124	50
32	180	Winston	Taylor	WTAYLOR	650.507.9876	24-JAN-06	SH_CLERK	3200	(null)	120	50
33	181	Jean	Fleaur	JFLEAUR	650.507.9877	23-FEB-06	SH_CLERK	3100	(null)	120	50
34	182	Martha	Sullivan	MSULLIVA	650.507.9878	21-JUN-07	SH_CLERK	2500	(null)	120	50
35	183	Girard	Geoni	GGEONI	650.507.9879	03-FEB-08	SH_CLERK	2800	(null)	120	50

| Line 3 Column 41 | Insert | Modified | Window: C

Q18)

Welcome Page | hr

Worksheet | Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE DEPARTMENT_ID IN (10, 20, 30)
AND DEPARTMENT_ID <> 40;
```

Query Result | All Rows Fetched: 9 in 0.003 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	200	Jennifer	Whalen	JWHALEN	515.123.4444	17-SEP-03	AD_ASST	4400	(null)	101	10
2	201	Michael	Hartstein	MHARTSTE	515.123.5555	17-FEB-04	MK_MAN	13000	(null)	100	20
3	202	Pat	Fay	PFAY	603.123.6666	17-AUG-05	MK_REP	6000	(null)	201	20
4	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
5	115	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
6	116	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
7	117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
8	118	Guy	Himuro	GHIIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
9	119	Karen	Colmenares	KCOLMENAR	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30

Q19)

Welcome Page | hr

Worksheet | Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY < (SELECT MIN(SALARY)
FROM EMPLOYEES
WHERE DEPARTMENT_ID = 50);
```

Query Result | All Rows Fetched: 0 in 0.003 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
--	-------------	------------	-----------	-------	--------------	-----------	--------	--------	----------------	------------	---------------

Q20)

Welcome Page | hr

Worksheet | Query Builder

```
SELECT *
FROM EMPLOYEES
WHERE SALARY > (SELECT MAX(SALARY)
FROM EMPLOYEES
WHERE DEPARTMENT_ID = 90);
```

Query Result | All Rows Fetched: 0 in 0.005 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
--	-------------	------------	-----------	-------	--------------	-----------	--------	--------	----------------	------------	---------------