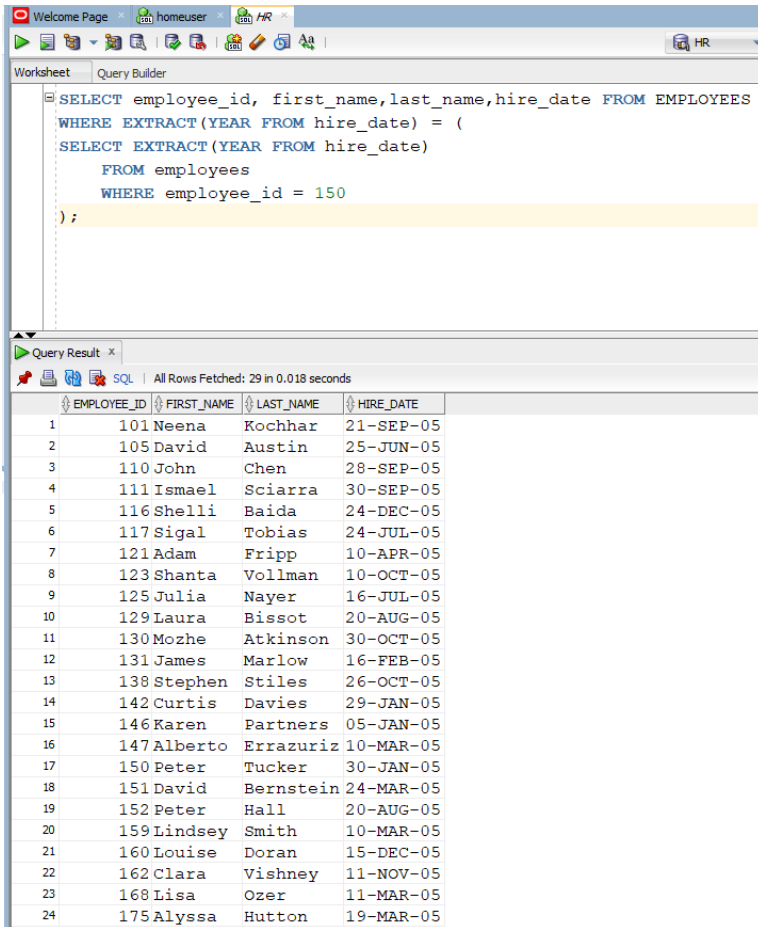


# DB LAB 1 – HOMETASKS

23K-0594

Q1.

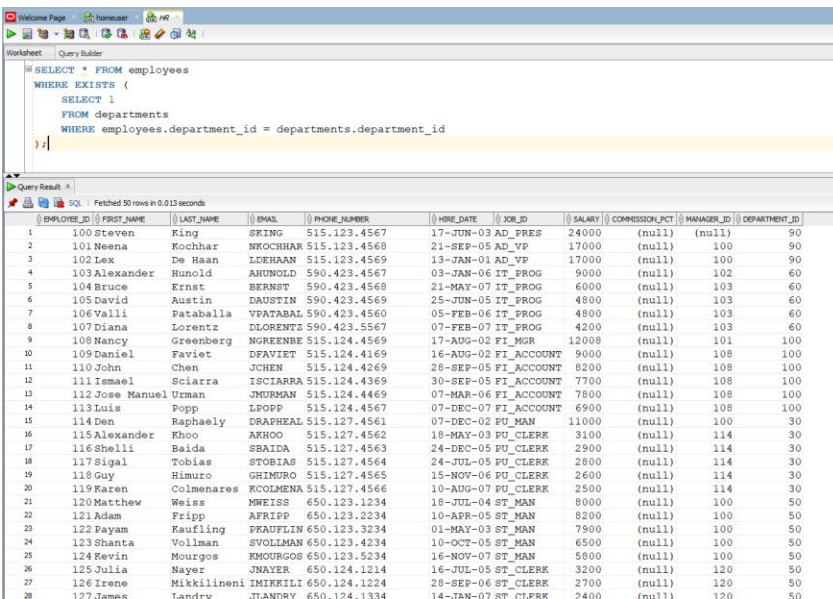


The screenshot shows the Oracle SQL Developer interface. The 'Query Builder' tab is active, displaying a SQL query that filters employees by hire date. The 'Query Result' tab shows the results of the query, which are 29 rows of employee data.

```
SELECT employee_id, first_name, last_name, hire_date FROM EMPLOYEES
WHERE EXTRACT(YEAR FROM hire_date) = (
SELECT EXTRACT(YEAR FROM hire_date)
FROM employees
WHERE employee_id = 150
);
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	HIRE_DATE
101	Neena	Kochhar	21-SEP-05
105	David	Austin	25-JUN-05
110	John	Chen	28-SEP-05
111	Ismael	Sciarra	30-SEP-05
116	Shelli	Baida	24-DEC-05
117	Sigal	Tobias	24-JUL-05
121	Adam	Fripp	10-APR-05
123	Shanta	Vollman	10-OCT-05
125	Julia	Nayer	16-JUL-05
129	Laura	Bissot	20-AUG-05
130	Mozhe	Atkinson	30-OCT-05
131	James	Marlow	16-FEB-05
138	Stephen	Stiles	26-OCT-05
142	Curtis	Davies	29-JAN-05
146	Karen	Partners	05-JAN-05
147	Alberto	Errazuriz	10-MAR-05
150	Peter	Tucker	30-JAN-05
151	David	Bernstein	24-MAR-05
152	Peter	Hall	20-AUG-05
159	Lindsey	Smith	10-MAR-05
160	Louise	Doran	15-DEC-05
162	Clara	Vishney	11-NOV-05
168	Lisa	Ozer	11-MAR-05
175	Alyssa	Hutton	19-MAR-05

Q2.



The screenshot shows the Oracle SQL Developer interface. The 'Query Builder' tab is active, displaying a SQL query that filters employees by department. The 'Query Result' tab shows the results of the query, which are 50 rows of employee data.

```
SELECT * FROM employees
WHERE EXISTS (
SELECT 1
FROM departments
WHERE employees.department_id = departments.department_id
);
```

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	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
8	Diana	Lorentz	DLORENTZ	590.423.4567	07-FEB-07	IT_PROG	4200	(null)	103	60
9	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	100
10	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	100
11	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
12	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
13	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
14	Dols	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	100
15	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
16	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
17	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
18	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
19	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
20	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
21	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
22	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
23	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
24	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
25	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
26	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
27	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
28	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50

Q3.

Worksheet Query Builder

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

Query Result x

SQL All Rows Fetched: 30 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	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
3	112	Jose Manuel	Uman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
4	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	100
5	122	Payam	Kaufling	PKAUFLLN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
6	124	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
7	132	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121	50
8	141	Trenna	Rajs	TRAJS	650.121.8009	17-OCT-03	ST_CLERK	3500	(null)	124	50
9	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100	80
10	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
11	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
12	164	Mattea	Marvins	MMARVINS	011.44.1346.329268	24-JAN-08	SA_REP	7200	0.1	147	80
13	165	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6800	0.1	147	80
14	166	Sundar	Ande	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	80
15	168	Lisa	Ozer	LOZER	011.44.1343.929268	11-MAR-05	SA_REP	11500	0.25	148	80
16	170	Taylor	Fox	TFOX	011.44.1343.729268	24-JAN-06	SA_REP	9600	0.2	148	80
17	171	William	Smith	WSMITH	011.44.1343.629268	23-FEB-07	SA_REP	7400	0.15	148	80
18	172	Elizabeth	Bates	EBATES	011.44.1343.529268	24-MAR-07	SA_REP	7300	0.15	148	80
19	173	Sundita	Kumar	SKUMAR	011.44.1343.329268	21-APR-08	SA_REP	6100	0.1	148	80
20	175	Alyssa	Hutton	AHUTTON	011.44.1644.429266	19-MAR-05	SA_REP	8800	0.25	149	80
21	176	Jonathan	Taylor	JTAYLOR	011.44.1644.429265	24-MAR-06	SA_REP	8600	0.2	149	80
22	177	Jack	Livingston	JLIVINGS	011.44.1644.429264	23-APR-06	SA_REP	8400	0.2	149	80
23	185	Alexis	Bull	ABULL	650.509.2876	20-FEB-05	SH_CLERK	4100	(null)	121	50
24	186	Julia	Dellinger	JDELLING	650.509.3876	24-JUN-06	SH_CLERK	3400	(null)	121	50
25	188	Kelly	Chung	KCHUNG	650.505.1876	14-JUN-05	SH_CLERK	3800	(null)	122	50
26	192	Sarah	Bell	SBELL	650.501.1876	04-FEB-04	SH_CLERK	4000	(null)	123	50
27	193	Britney	Everett	BEVERETT	650.501.2876	03-MAR-05	SH_CLERK	3900	(null)	123	50

Q4.

Worksheet Query Builder

```
SELECT * FROM employees WHERE COMMISSION_PCT IS NULL;
```

Query Result x

SQL Fetched 50 rows in 0.011 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	Neena	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	103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102	60
5	104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103	60
6	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	60
7	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	60
8	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	60
9	108	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	100
10	109	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	100
11	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
12	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
13	112	Jose Manuel	Uman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
14	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	100
15	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
16	115	Alexander	Kho	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
17	116	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
18	117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
19	118	Guy	Himuro	GHIIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
20	119	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
21	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
22	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
23	122	Payam	Kaufling	PKAUFLLN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
24	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
25	124	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
26	125	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
27	126	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
28	127	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
29	128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50
30	129	Laura	Bissot	LBISSOT	650.124.5234	20-AUG-05	ST_CLERK	3300	(null)	121	50
31	130	Mozhe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121	50

Q5.

Worksheet Query Builder

```
SELECT * FROM employees WHERE department_id = (
    SELECT department_id
    FROM employees
    WHERE employee_id = 150
);
```

Query Result x

SQL | All Rows Fetched: 34 in 0.009 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100	80
2	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
3	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
4	148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100	80
5	149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	80
6	150	Peter	Tucker	PTUCKER	011.44.1344.129268	30-JAN-05	SA_REP	10000	0.3	145	80
7	151	David	Bernstein	DBERNSTE	011.44.1344.345268	24-MAR-05	SA_REP	9500	0.25	145	80
8	152	Peter	Hall	PHALL	011.44.1344.478968	20-AUG-05	SA_REP	9000	0.25	145	80
9	153	Christopher	Olsen	COLSEN	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145	80
10	154	Nanette	Cambrault	NCAMBRAU	011.44.1344.987668	09-DEC-06	SA_REP	7500	0.2	145	80
11	155	Oliver	Tuvault	OTUVVAULT	011.44.1344.486508	23-NOV-07	SA_REP	7000	0.15	145	80
12	156	Janette	King	JKING	011.44.1345.429268	30-JAN-04	SA_REP	10000	0.35	146	80
13	157	Patrick	Sully	PSULLY	011.44.1345.929268	04-MAR-04	SA_REP	9500	0.35	146	80
14	158	Allan	McEwen	AMCEWEN	011.44.1345.829268	01-AUG-04	SA_REP	9000	0.35	146	80
15	159	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-05	SA_REP	8000	0.3	146	80
16	160	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146	80
17	161	Sarath	Sewall	SSEWALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	80
18	162	Clara	Vishney	CVISHNEY	011.44.1346.129268	11-NOV-05	SA_REP	10500	0.25	147	80
19	163	Danielle	Greene	DGREENE	011.44.1346.229268	19-MAR-07	SA_REP	9500	0.15	147	80
20	164	Mattea	Marvins	MMARVINS	011.44.1346.329268	24-JAN-08	SA_REP	7200	0.1	147	80
21	165	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6900	0.1	147	80
22	166	Sundar	Ande	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	80
23	167	Amit	Banda	ABANDA	011.44.1346.729268	21-APR-08	SA_REP	6200	0.1	147	80
24	168	Lisa	Ozer	LOZER	011.44.1343.929268	11-MAR-05	SA_REP	11500	0.25	148	80

Q6.

Worksheet Query Builder

```
SELECT * FROM employees WHERE job_id LIKE '%MAN%';
```

Query Result x

SQL | All Rows Fetched: 12 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	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
2	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
3	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
4	122	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
5	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
6	124	Kevin	Mourgog	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
7	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100	80
8	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
9	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
10	148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100	80
11	149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	80
12	201	Michael	Hartstein	MHARTSTE	515.123.5555	17-FEB-04	MK_MAN	13000	(null)	100	20

Q7.

Welcome Page | homeuser | HR

Worksheet | Query Builder

```

SELECT * FROM employees WHERE manager_id = (
    SELECT manager_id
    FROM employees
    WHERE employee_id = 120
);

```

Query Result x

SQL | All Rows Fetched: 14 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	102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	90
3	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
4	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
5	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
6	122	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
7	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
8	124	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
9	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100	80
10	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
11	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
12	148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100	80
13	149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	80
14	201	Michael	Hartstein	MHARTSTE	515.123.5555	17-FEB-04	MK_MAN	13000	(null)	100	20

Q8.

Welcome Page | homeuser | HR

Worksheet | Query Builder

```

SELECT * FROM employees WHERE job_id IN (
    SELECT job_id
    FROM employees
    WHERE department_id = 80
);

```

Query Result x

SQL | All Rows Fetched: 35 in 0.024 seconds

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100	80
2	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100	80
3	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100	80
4	148	Gerald	Cambrault	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100	80
5	149	Eleni	Zlotkey	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA_MAN	10500	0.2	100	80
6	150	Peter	Tucker	PTUCKER	011.44.1344.129268	30-JAN-05	SA_REP	10000	0.3	145	80
7	151	David	Bernstein	DBERNSTE	011.44.1344.345268	24-MAR-05	SA_REP	9500	0.25	145	80
8	152	Peter	Hall	PHALL	011.44.1344.478968	20-AUG-05	SA_REP	9000	0.25	145	80
9	153	Christopher	Olsen	COLSEN	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145	80
10	154	Nanette	Cambrault	NCAMBRAU	011.44.1344.987668	09-DEC-06	SA_REP	7500	0.2	145	80
11	155	Oliver	Tuvault	OTUVAULT	011.44.1344.486508	23-NOV-07	SA_REP	7000	0.15	145	80
12	156	Janette	King	JKING	011.44.1345.429268	30-JAN-04	SA_REP	10000	0.35	146	80
13	157	Patrick	Sully	PSULLY	011.44.1345.929268	04-MAR-04	SA_REP	9500	0.35	146	80
14	158	Allan	McEwen	AMCEWEN	011.44.1345.829268	01-AUG-04	SA_REP	9000	0.35	146	80
15	159	Lindsey	Smith	LSMITH	011.44.1345.729268	10-MAR-05	SA_REP	8000	0.3	146	80
16	160	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146	80
17	161	Sarath	Sewall	SSEWALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	80
18	162	Clara	Vishney	CVISHNEY	011.44.1346.129268	11-NOV-05	SA_REP	10500	0.25	147	80
19	163	Danielle	Greene	DGREENE	011.44.1346.229268	19-MAR-07	SA_REP	9500	0.15	147	80
20	164	Mattea	Marvins	MMARVINS	011.44.1346.329268	24-JAN-08	SA_REP	7200	0.1	147	80
21	165	David	Lee	DLEE	011.44.1346.529268	23-FEB-08	SA_REP	6800	0.1	147	80
22	166	Sundar	Ande	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	80
23	167	Amit	Banda	ABANDA	011.44.1346.729268	21-APR-08	SA_REP	6200	0.1	147	80
24	168	Lisa	Ozer	LOZER	011.44.1343.929268	11-MAR-05	SA_REP	11500	0.25	148	80
25	169	Harrison	Bloom	HBLOOM	011.44.1343.829268	23-MAR-06	SA_REP	10000	0.2	148	80
26	170	Taylor	Fox	TFOX	011.44.1343.729268	24-JAN-06	SA_REP	9600	0.2	148	80
27	171	William	Smith	WSMITH	011.44.1343.629268	23-FEB-07	SA_REP	7400	0.15	148	80
28	172	Elizabeth	Bates	EBATES	011.44.1343.529268	24-MAR-07	SA_REP	7300	0.15	148	80
29	173	Gudena	Winter	GWINTER	011.44.1343.429268	21-FEB-08	SA_REP	6100	0.1	148	80

Q9.

Worksheet Query Builder

```

SELECT * FROM employees WHERE department_id IN (
    SELECT department_id
    FROM employees
    GROUP BY department_id
    HAVING MAX(salary) <= 15000
);
    
```

Query Result x

SQL | Fetched 50 rows in 0.011 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID	
1	108	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	100
2	109	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	100
3	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	100
4	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	100
5	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	100
6	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	100
7	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	30
8	115	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	114	30
9	116	Shelli	Baida	SBAIDA	515.127.4563	24-DEC-05	PU_CLERK	2900	(null)	114	30
10	117	Sigal	Tobias	STOBIAS	515.127.4564	24-JUL-05	PU_CLERK	2800	(null)	114	30
11	118	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114	30
12	119	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114	30
13	201	Michael	Hartstein	MHARTSTE	515.123.5555	17-FEB-04	MK_MAN	13000	(null)	100	20
14	202	Pat	Fay	PFAY	603.123.6666	17-AUG-05	MK_REP	6000	(null)	201	20
15	204	Hermann	Baer	HBAER	515.123.8888	07-JUN-02	PR_REP	10000	(null)	101	70
16	205	Shelley	Higgins	SHIGGINS	515.123.8080	07-JUN-02	AC_MGR	12008	(null)	101	110
17	206	William	Gietz	WGIETZ	515.123.8181	07-JUN-02	AC_ACCOUNT	8300	(null)	205	110
18	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100	50
19	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100	50
20	122	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100	50
21	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	50
22	124	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100	50
23	125	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120	50
24	126	Irene	Mikkilineni	MIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120	50
25	127	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120	50
26	128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120	50

Q10.

Worksheet Query Builder

```

SELECT * FROM employees WHERE department_id IN (
    SELECT department_id
    FROM employees
    WHERE salary > 20000
);
    
```

Query Result x

SQL | All Rows Fetched: 3 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	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	90
2	101	Neena	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