

## 1. List all employees whose salary is between 4000 and 9000.

SELECT \* FROM Employees

WHERE SALARY BETWEEN 4000 AND 9000;

```
SELECT * FROM Employees
WHERE SALARY BETWEEN 4000 AND 9000;
```

Query Result x

SQL | All Rows Fetched: 42 in 0.014 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102
2	104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103
3	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103
4	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103
5	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103
6	109	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108
7	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108
8	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108
9	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108
10	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108
11	120	Matthew	Weiss	MWEISS	650.123.1234	18-JUL-04	ST_MAN	8000	(null)	100
12	121	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	100
13	122	Payam	Kaufling	PKAUFLIN	650.123.3234	01-MAY-03	ST_MAN	7900	(null)	100

## 2. Show all employees who were hired after 01-JAN-2006.

SELECT \*

FROM employees

WHERE hire\_date > TO\_DATE('01-JAN-2006', 'DD-MON-YYYY');

```
SELECT *
FROM employees
WHERE hire_date > TO_DATE('01-JAN-2006', 'DD-MON-YYYY');
```

Query Result x

SQL | Fetched 50 rows in 0.063 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102
2	104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103
3	106	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103
4	107	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103
5	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108
6	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108
7	118	Guy	Himuro	GHIMURO	515.127.4565	15-NOV-06	PU_CLERK	2600	(null)	114
8	119	Karen	Colmenares	KCOLMENA	515.127.4566	10-AUG-07	PU_CLERK	2500	(null)	114
9	124	Kevin	Mourgos	KMOURGOS	650.123.5234	16-NOV-07	ST_MAN	5800	(null)	100
10	126	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120
11	127	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120
12	128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120
13	132	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121
14	134	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122
15	135	Pat	De Haan	PDEHAAN	650.123.1834	13-DEC-07	ST_CLERK	2400	(null)	122

### 3. List employees whose job\_id is either 'SA\_REP' or 'ST\_CLERK'.

SELECT \* FROM Employees

WHERE JOB\_ID IN ('SA\_REP','ST\_CLERK');

```
SELECT * FROM Employees
WHERE JOB_ID IN ('SA_REP','ST_CLERK');
```

Query Result x

SQL | Fetched 50 rows in 0.015 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	125	Julia	Nayer	JNAYER	650.124.1214	16-JUL-05	ST_CLERK	3200	(null)	120
2	126	Irene	Mikkilineni	IMIKKILI	650.124.1224	28-SEP-06	ST_CLERK	2700	(null)	120
3	127	James	Landry	JLANDRY	650.124.1334	14-JAN-07	ST_CLERK	2400	(null)	120
4	128	Steven	Markle	SMARKLE	650.124.1434	08-MAR-08	ST_CLERK	2200	(null)	120
5	129	Laura	Bissot	LBISSOT	650.124.5234	20-AUG-05	ST_CLERK	3300	(null)	121
6	130	Mozhe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121
7	131	James	Marlow	JAMRLOW	650.124.7234	16-FEB-05	ST_CLERK	2500	(null)	121
8	132	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121
9	133	Jason	Mallin	JMALLIN	650.127.1934	14-JUN-04	ST_CLERK	3300	(null)	122
10	134	Michael	Rogers	MROGERS	650.127.1834	26-AUG-06	ST_CLERK	2900	(null)	122
11	135	Ki	Gee	KGEE	650.127.1734	12-DEC-07	ST_CLERK	2400	(null)	122
12	136	Hazel	Philtanker	HPHILTAN	650.127.1634	06-FEB-08	ST_CLERK	2200	(null)	122
13	137	Renske	Ladwig	RLADWIG	650.121.1234	14-JUL-03	ST_CLERK	3600	(null)	123
14	138	Stephen	Stiles	SSTILES	650.121.2034	26-OCT-05	ST_CLERK	3200	(null)	123

### 4. Display all employees whose last name ends with 'n'.

SELECT \* FROM Employees

WHERE LAST\_NAME LIKE '%n';

```
SELECT * FROM Employees
WHERE LAST_NAME LIKE '%n';
```

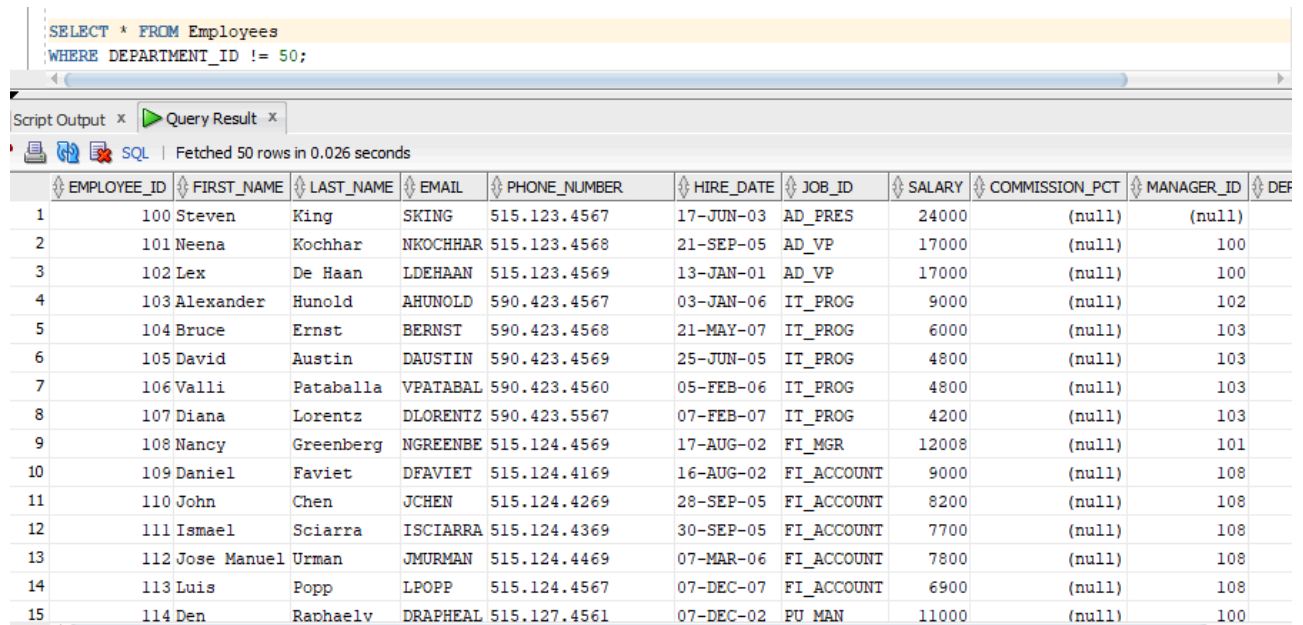
Query Result x

SQL | All Rows Fetched: 19 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	102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100
2	105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103
3	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108
4	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108
5	123	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100
6	130	Mozhe	Atkinson	MATKINSO	650.124.6234	30-OCT-05	ST_CLERK	2800	(null)	121
7	132	TJ	Olson	TJOLSON	650.124.8234	10-APR-07	ST_CLERK	2100	(null)	121
8	133	Jason	Mallin	JMALLIN	650.127.1934	14-JUN-04	ST_CLERK	3300	(null)	122
9	151	David	Bernstein	DBERNSTE	011.44.1344.345268	24-MAR-05	SA_REP	9500	0.25	145
10	153	Christopher	Olsen	COLSEN	011.44.1344.498718	30-MAR-06	SA_REP	8000	0.2	145
11	158	Allan	McEwen	AMCEWEN	011.44.1345.829268	01-AUG-04	SA_REP	9000	0.35	146
12	160	Louise	Doran	LDORAN	011.44.1345.629268	15-DEC-05	SA_REP	7500	0.3	146
13	175	Alyssa	Hutton	AHUTTON	011.44.1644.429266	19-MAR-05	SA_REP	8800	0.25	149
14	177	Jack	Livingston	JLIVINGS	011.44.1644.429264	23-APR-06	SA_REP	8400	0.2	149
15	179	Charles	Johnson	CJOHNSON	011.44.1644.429262	04-JAN-08	SA_REP	6200	0.1	149

**5. List all employees from department\_id not equal to 50.**

```
SELECT * FROM Employees
WHERE DEPARTMENT_ID != 50;
```

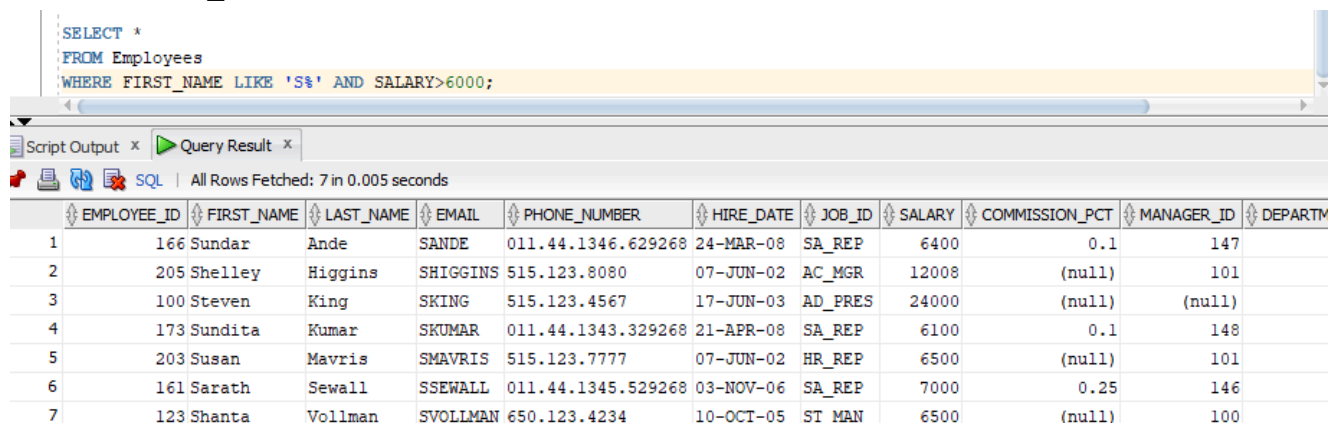


The screenshot shows a SQL query window with the query: `SELECT * FROM Employees WHERE DEPARTMENT_ID != 50;`. The results are displayed in a table with 11 columns: EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, EMAIL, PHONE\_NUMBER, HIRE\_DATE, JOB\_ID, SALARY, COMMISSION\_PCT, MANAGER\_ID, and DEPARTMENT\_ID. The table contains 15 rows of data, all with DEPARTMENT\_ID values other than 50.

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)	10
2	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100	10
3	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100	10
4	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	102	10
5	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	(null)	103	10
6	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	(null)	103	10
7	Valli	Pataballa	VPATABAL	590.423.4560	05-FEB-06	IT_PROG	4800	(null)	103	10
8	Diana	Lorentz	DLORENTZ	590.423.5567	07-FEB-07	IT_PROG	4200	(null)	103	10
9	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101	10
10	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108	10
11	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108	10
12	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108	10
13	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108	10
14	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108	10
15	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100	10

**6. Show employees whose first\_name starts with 's' and salary is greater than 6000.**

```
SELECT *
FROM Employees
WHERE FIRST_NAME LIKE 'S%' AND SALARY>6000;
```



The screenshot shows a SQL query window with the query: `SELECT * FROM Employees WHERE FIRST_NAME LIKE 'S%' AND SALARY>6000;`. The results are displayed in a table with 11 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 7 rows of data, all with first names starting with 'S' and salaries greater than 6000.

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	Sundar	Ade	SANDE	011.44.1346.629268	24-MAR-08	SA_REP	6400	0.1	147	10
2	Shelley	Higgins	SHIGGINS	515.123.8080	07-JUN-02	AC_MGR	12008	(null)	101	10
3	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)	10
4	Sundita	Kumar	SKUMAR	011.44.1343.329268	21-APR-08	SA_REP	6100	0.1	148	10
5	Susan	Mavris	SMAVRIS	515.123.7777	07-JUN-02	HR_REP	6500	(null)	101	10
6	Sarath	Sewall	SSEWALL	011.44.1345.529268	03-NOV-06	SA_REP	7000	0.25	146	10
7	Shanta	Vollman	SVOLLMAN	650.123.4234	10-OCT-05	ST_MAN	6500	(null)	100	10

### 7. Retrieve all employees whose salary is greater than 10000 or job\_id = 'FI\_ACCOUNT'.

SELECT \* FROM Employees

WHERE SALARY>10000 or JOB\_ID ='FI\_ACCOUNT';

```
SELECT * FROM Employees
WHERE SALARY>10000 or JOB_ID ='FI_ACCOUNT';
```

Script Output x Query Result x

SQL | All Rows Fetched: 20 in 0.012 seconds

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPT
1	100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	(null)	(null)
2	101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	(null)	100
3	102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	(null)	100
4	108	Nancy	Greenberg	NGREENBE	515.124.4569	17-AUG-02	FI_MGR	12008	(null)	101
5	109	Daniel	Faviet	DFAVIET	515.124.4169	16-AUG-02	FI_ACCOUNT	9000	(null)	108
6	110	John	Chen	JCHEN	515.124.4269	28-SEP-05	FI_ACCOUNT	8200	(null)	108
7	111	Ismael	Sciarra	ISCIARRA	515.124.4369	30-SEP-05	FI_ACCOUNT	7700	(null)	108
8	112	Jose Manuel	Urman	JMURMAN	515.124.4469	07-MAR-06	FI_ACCOUNT	7800	(null)	108
9	113	Luis	Popp	LPOPP	515.124.4567	07-DEC-07	FI_ACCOUNT	6900	(null)	108
10	114	Den	Raphaely	DRAPHEAL	515.127.4561	07-DEC-02	PU_MAN	11000	(null)	100
11	145	John	Russell	JRUSSEL	011.44.1344.429268	01-OCT-04	SA_MAN	14000	0.4	100
12	146	Karen	Partners	KPARTNER	011.44.1344.467268	05-JAN-05	SA_MAN	13500	0.3	100
13	147	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	100
14	148	Gerald	Cambraut	GCAMBRAU	011.44.1344.619268	15-OCT-07	SA_MAN	11000	0.3	100
15	149	Eleni	Zlotkev	EZLOTKEY	011.44.1344.429018	29-JAN-08	SA MAN	10500	0.2	100

### 8. Display employees whose hire\_date is before 01-JAN-2002.

SELECT \*

FROM employees

WHERE hire\_date < TO\_DATE('01-JAN-2002', 'DD-MON-YYYY');

```
SELECT *
FROM employees
WHERE hire_date < TO_DATE('01-JAN-2002', 'DD-MON-YYYY');
```

Script Output x Query Result x

SQL | All Rows Fetched: 1 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	102	Lex	De Haan	LDEHAAN	13-JAN-01	AD_VP	17000	(null)	100	90

### 9. List employees who do not have a manager\_id.

SELECT \*

FROM employees

WHERE manager\_id IS NULL;

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

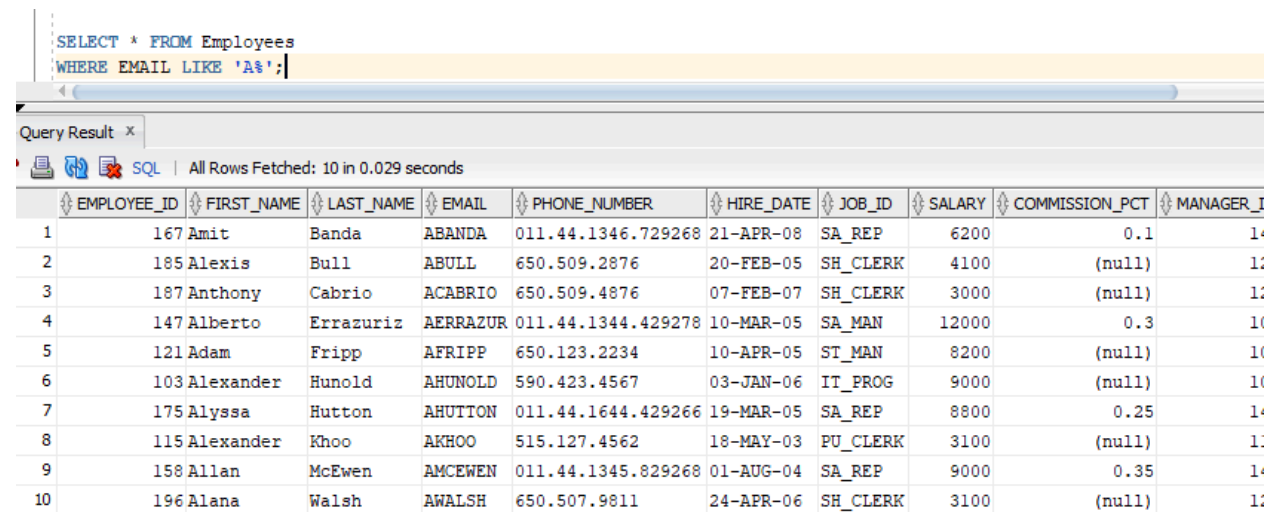
Script Output x Query Result x

SQL | All Rows Fetched: 1 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	100	Steven	King	SKING	17-JUN-03	AD_PRES	24000	(null)	(null)	90

**10. Show employees whose email contains 'A' as the first letter.**

```
SELECT * FROM Employees
WHERE EMAIL LIKE 'A%';
```

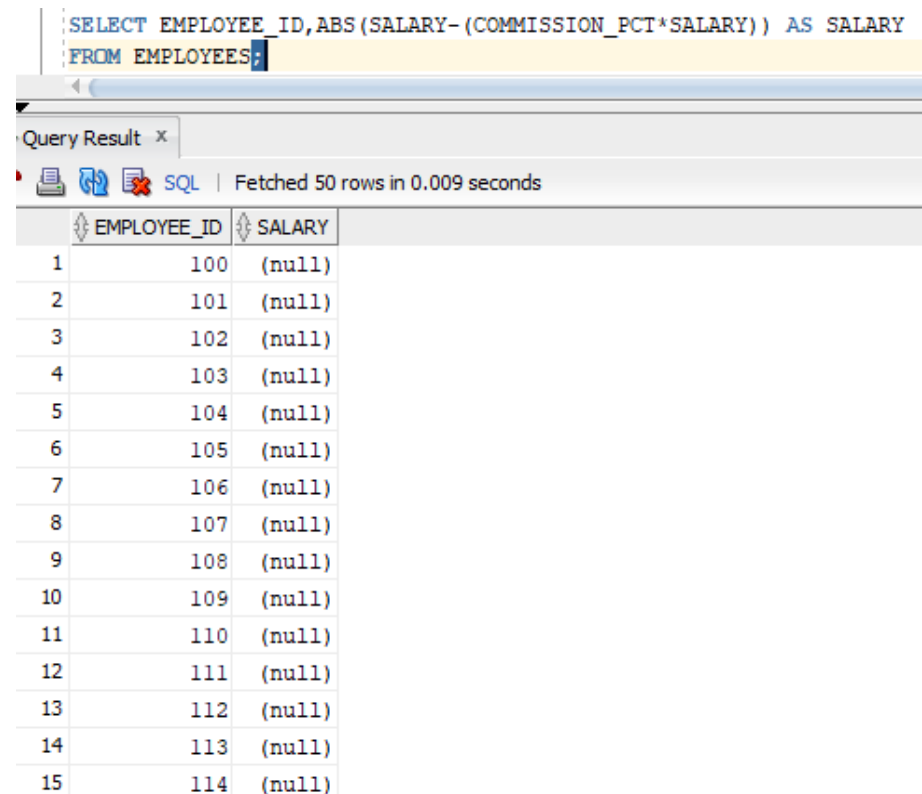


The screenshot shows a SQL query window with the query: `SELECT * FROM Employees WHERE EMAIL LIKE 'A%';`. The results are displayed in a table with 10 rows. The columns are: EMPLOYEE\_ID, FIRST\_NAME, LAST\_NAME, EMAIL, PHONE\_NUMBER, HIRE\_DATE, JOB\_ID, SALARY, COMMISSION\_PCT, and MANAGER\_ID. The results show employees whose email starts with 'A'.

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID
1	Amit	Banda	ABANDA	011.44.1346.729268	21-APR-08	SA_REP	6200	0.1	10
2	Alexis	Bull	ABULL	650.509.2876	20-FEB-05	SH_CLERK	4100	(null)	10
3	Anthony	Cabrio	ACABRIO	650.509.4876	07-FEB-07	SH_CLERK	3000	(null)	10
4	Alberto	Errazuriz	AERRAZUR	011.44.1344.429278	10-MAR-05	SA_MAN	12000	0.3	10
5	Adam	Fripp	AFRIPP	650.123.2234	10-APR-05	ST_MAN	8200	(null)	10
6	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	(null)	10
7	Alyssa	Hutton	AHUTTON	011.44.1644.429266	19-MAR-05	SA_REP	8800	0.25	10
8	Alexander	Khoo	AKHOO	515.127.4562	18-MAY-03	PU_CLERK	3100	(null)	10
9	Allan	McEwen	AMCEWEN	011.44.1345.829268	01-AUG-04	SA_REP	9000	0.35	10
10	Alana	Walsh	AWALSH	650.507.9811	24-APR-06	SH_CLERK	3100	(null)	10

**11. Find the absolute difference between salary and commission\_pct (converted to actual amount by multiplying with salary).**

```
SELECT EMPLOYEE_ID,ABS(SALARY-(COMMISSION_PCT*SALARY)) AS SALARY
FROM EMPLOYEES;
```

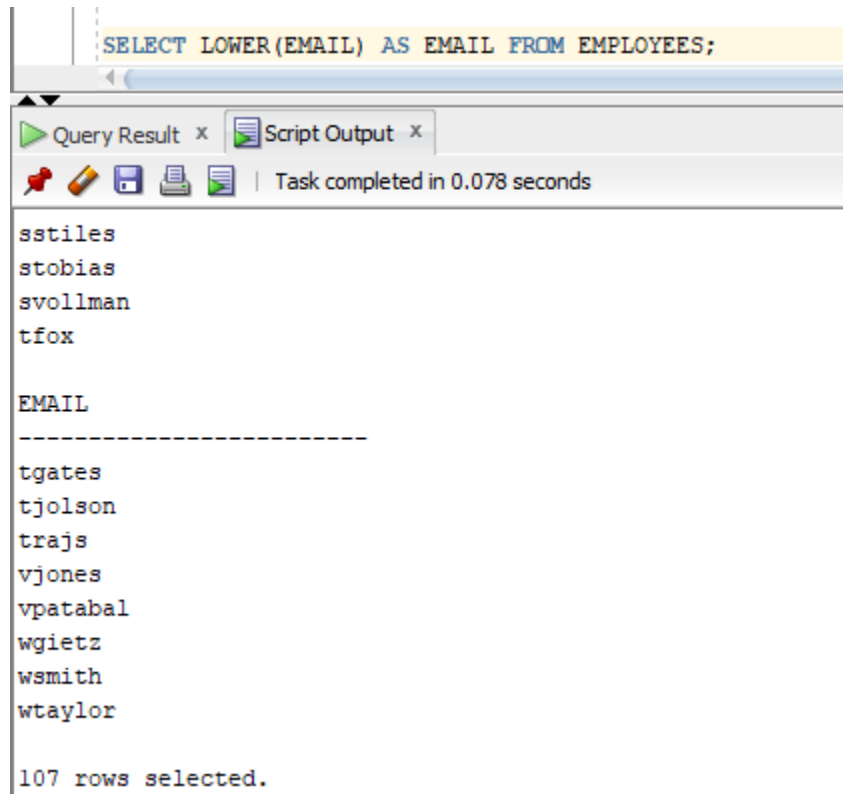


The screenshot shows a SQL query window with the query: `SELECT EMPLOYEE_ID,ABS(SALARY-(COMMISSION_PCT*SALARY)) AS SALARY FROM EMPLOYEES;`. The results are displayed in a table with 15 rows. The columns are: EMPLOYEE\_ID and SALARY. The results show the absolute difference between salary and commission\_pct for employees.

EMPLOYEE_ID	SALARY
1	100 (null)
2	101 (null)
3	102 (null)
4	103 (null)
5	104 (null)
6	105 (null)
7	106 (null)
8	107 (null)
9	108 (null)
10	109 (null)
11	110 (null)
12	111 (null)
13	112 (null)
14	113 (null)
15	114 (null)

**16. Display all email addresses of employees in small letters.**

SELECT LOWER(EMAIL) AS EMAIL FROM EMPLOYEES;



The screenshot shows a SQL query execution window. At the top, the query `SELECT LOWER(EMAIL) AS EMAIL FROM EMPLOYEES;` is entered in a text area. Below the text area, there are tabs for 'Query Result' and 'Script Output'. The 'Query Result' tab is active, displaying the results of the query. The results are shown in a list format, with the column header 'EMAIL' and a dashed line separator. The list contains the following email addresses: sstiles, stobias, svollman, tfox, tgates, tjolson, trajs, vjones, vpatabal, wgietz, wsmith, and wtaylor. At the bottom of the window, it states '107 rows selected.'

```
SELECT LOWER(EMAIL) AS EMAIL FROM EMPLOYEES;
```

Query Result x Script Output x

Task completed in 0.078 seconds

EMAIL

-----

ssstiles  
stobias  
svollman  
tfox  
  
tgates  
tjolson  
trajs  
vjones  
vpatabal  
wgietz  
wsmith  
wtaylor

107 rows selected.