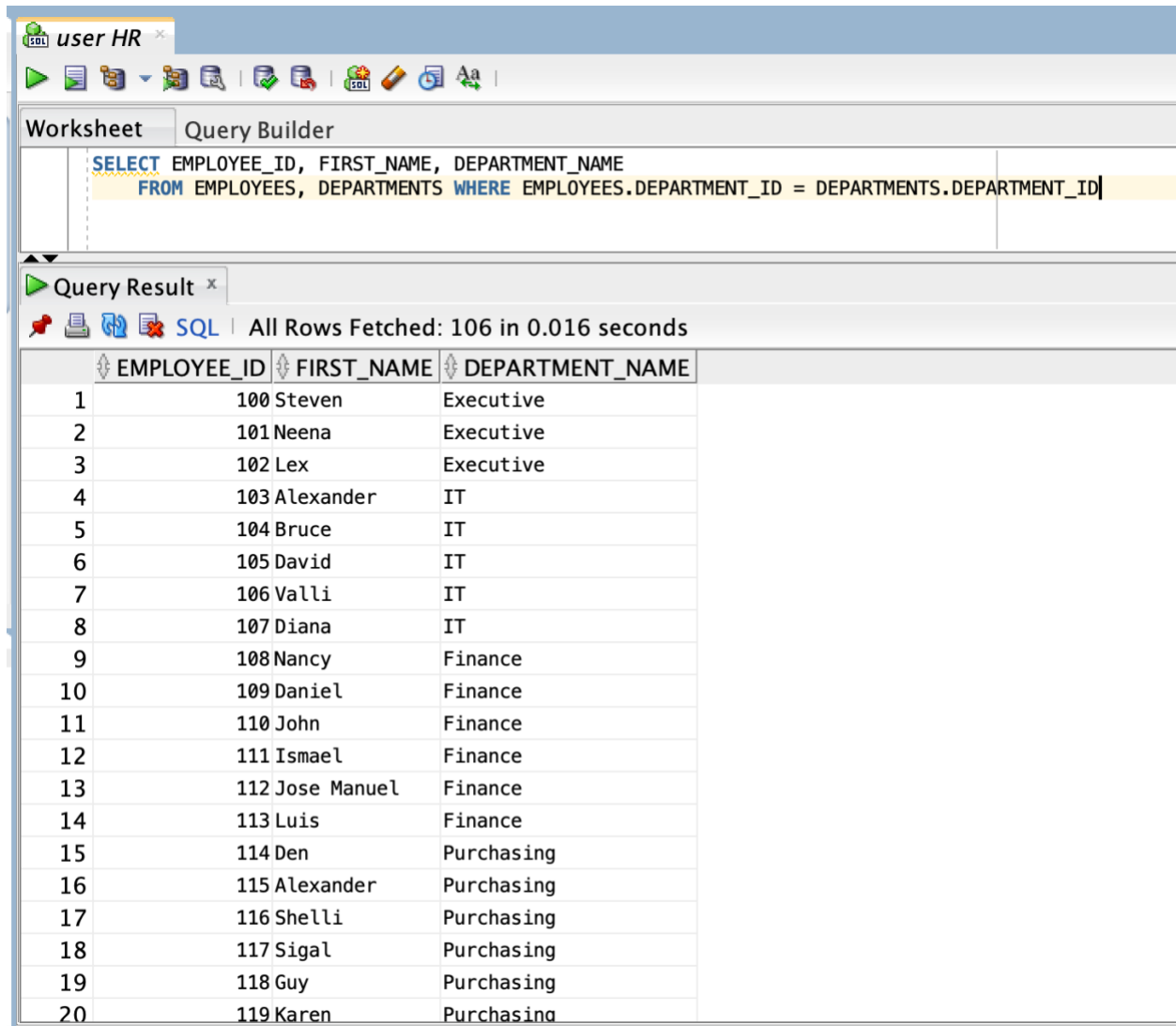


Exercise SQL01-EX-01:

Definiton : Write an SQL query that selects employee's id, employee's first name and employee's department name for all employees. (Please use HR.EMPLOYEES and HR.DEPARTMENTS tables.)



The screenshot shows an SQL IDE interface with a tab labeled "user HR". The "Query Builder" tab is active, displaying the following SQL query:

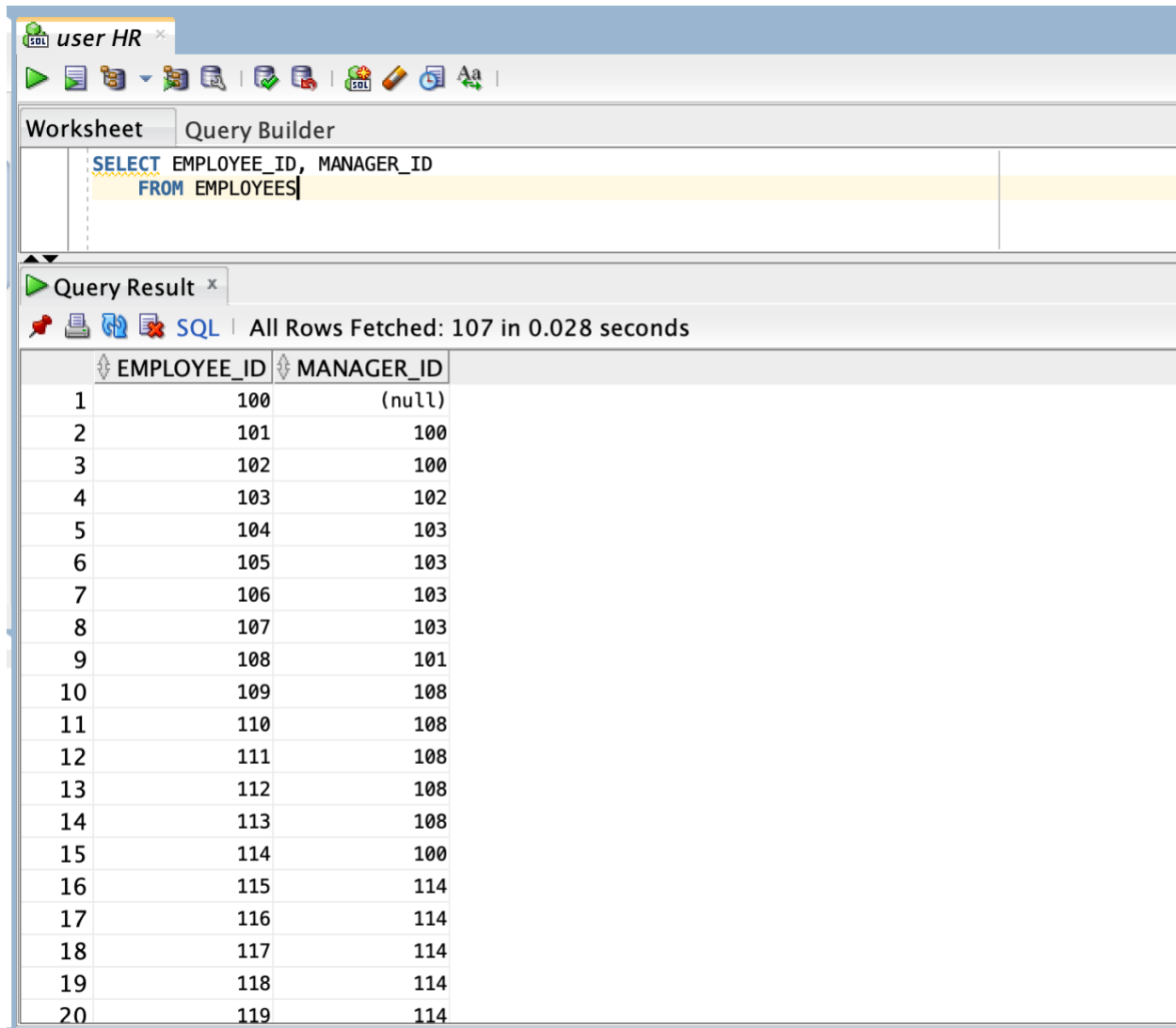
```
SELECT EMPLOYEE_ID, FIRST_NAME, DEPARTMENT_NAME  
FROM EMPLOYEES, DEPARTMENTS WHERE EMPLOYEES.DEPARTMENT_ID = DEPARTMENTS.DEPARTMENT_ID
```

Below the query editor, the "Query Result" tab is active, showing the results of the query. The status bar indicates "All Rows Fetched: 106 in 0.016 seconds". The results are displayed in a table with three columns: EMPLOYEE_ID, FIRST_NAME, and DEPARTMENT_NAME. The table contains 20 rows of data, numbered 1 through 20 in the first column.

	EMPLOYEE_ID	FIRST_NAME	DEPARTMENT_NAME
1	100	Steven	Executive
2	101	Neena	Executive
3	102	Lex	Executive
4	103	Alexander	IT
5	104	Bruce	IT
6	105	David	IT
7	106	Valli	IT
8	107	Diana	IT
9	108	Nancy	Finance
10	109	Daniel	Finance
11	110	John	Finance
12	111	Ismael	Finance
13	112	Jose Manuel	Finance
14	113	Luis	Finance
15	114	Den	Purchasing
16	115	Alexander	Purchasing
17	116	Shelli	Purchasing
18	117	Sigal	Purchasing
19	118	Guy	Purchasing
20	119	Karen	Purchasing

Exercise SQL01-EX-02:

Definiton : Create a report that displays the employee's id and their manager's id. (Please use HR.EMPLOYEES table)



The screenshot shows the SQL Developer interface with a query window titled "user HR". The query is:

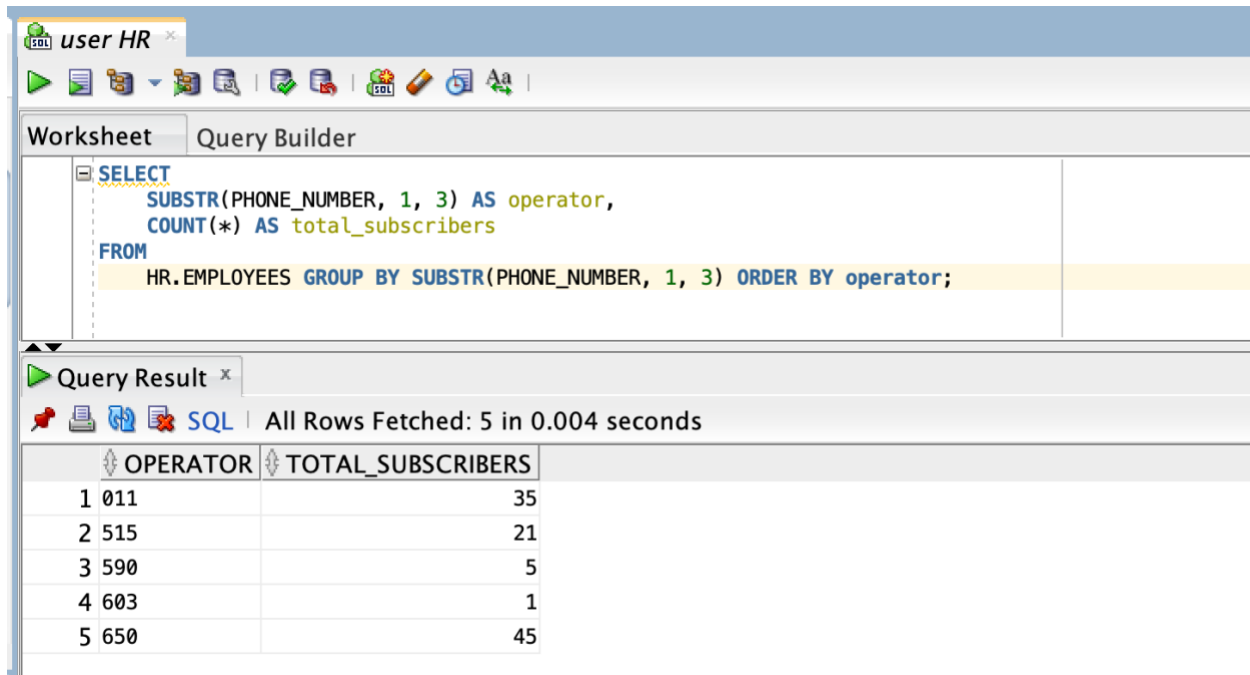
```
SELECT EMPLOYEE_ID, MANAGER_ID
FROM EMPLOYEES
```

The "Query Result" window shows the results of the query, displaying 20 rows. The columns are EMPLOYEE_ID and MANAGER_ID. The first row shows EMPLOYEE_ID 1 with a null manager. Subsequent rows show a hierarchy of employees and their managers.

	EMPLOYEE_ID	MANAGER_ID
1	100	(null)
2	101	100
3	102	100
4	103	102
5	104	103
6	105	103
7	106	103
8	107	103
9	108	101
10	109	108
11	110	108
12	111	108
13	112	108
14	113	108
15	114	100
16	115	114
17	116	114
18	117	114
19	118	114
20	119	114

Exercise SQL01-EX-03:

Definiton : For example; first three character of PHONE_NUMBER column gives us a operator of employee. Create a report that displays the operators and their total subscriber. But we want two different displays with diffrent queries. (Please use HR.EMPLOYEES table)



The screenshot shows the SQL Developer interface with a query window titled 'user HR'. The query is as follows:

```
SELECT  
  SUBSTR(PHONE_NUMBER, 1, 3) AS operator,  
  COUNT(*) AS total_subscribers  
FROM  
  HR.EMPLOYEES GROUP BY SUBSTR(PHONE_NUMBER, 1, 3) ORDER BY operator;
```

Below the query window, the 'Query Result' window displays the results of the query. It shows a table with two columns: 'OPERATOR' and 'TOTAL_SUBSCRIBERS'. The results are as follows:

	OPERATOR	TOTAL_SUBSCRIBERS
1	011	35
2	515	21
3	590	5
4	603	1
5	650	45

Exercise SQL01-EX-04:

Definiton : Create a table (table name like HR.EMP) from HR.EMPLOYEES table. Insert a new row to HR.EMP table and update this employee's phone number and salary. Delete your new row and display the HR.EMP table. Finally drop your table HR.EMP.

```
CREATE TABLE HR.EMP AS
SELECT * FROM HR.EMPLOYEES WHERE 1=0;

INSERT INTO HR.EMP (EMPLOYEE_ID, FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, HIRE_DATE, JOB_ID, SALARY,
COMMISSION_PCT, MANAGER_ID, DEPARTMENT_ID)
VALUES (5, 'John', 'Doe', 'JDOE', '1234567890', SYSDATE, 'IT_PROG', 6000, NULL, 100, 60);
```

Script Output x

Task completed in 0.056 seconds

Table HR.EMP created.

1 row inserted.

```
SELECT * FROM HR.EMP;
```

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.02 seconds

EMPLO...	FIRST...	LAST_NAME	EMAIL	PHONE...	HIRE_D...	JOB_ID	SALARY	COMMISSI...	MAN...	DEPAR...
1	5 John	Doe	JDOE	1234567890	30/07/2024	IT_PROG	6000	(null)	100	60

```
UPDATE HR.EMP
SET PHONE_NUMBER = '0987654321', SALARY = 7000 WHERE EMPLOYEE_ID = 5;
```

Script Output x

Task completed in 0.019 seconds

1 row updated.

```
DELETE FROM HR.EMP WHERE EMPLOYEE_ID = 5;

SELECT * FROM HR.EMP;
```





Script Output x Query Result x

SQL | All Rows Fetched: 0 in 0.004 seconds

EMPLO...	FIRST...	LAST...	EMAIL	PHONE...	HIRE_D...	JOB_ID	SALARY	COMMI...	MANA...	DEPAR...
----------	----------	---------	-------	----------	-----------	--------	--------	----------	---------	----------

Exercise SQL01-EX-05:

Definiton : Select employees' first name and last name as masked with "*" character as shown in sample output below.

Worksheet Query Builder	
<pre>SELECT SUBSTR(FIRST_NAME, 1, 2) LPAD('*', LENGTH(FIRST_NAME) - 2, '*') AS MASKED_FIRST_NAME, SUBSTR(LAST_NAME, 1, 2) LPAD('*', LENGTH(LAST_NAME) - 2, '*') AS MASKED_LAST_NAME FROM HR.EMPLOYEES;</pre>	
Query Result ×	
    SQL Fetched 50 rows in 0.014 seconds	
MASKED_FIRST_NAME	MASKED_LAST_NAME
1 El***	Ab**
2 Su****	An**
3 Mo***	At*****
4 Da***	Au****
5 He*****	Ba**
6 Sh****	Ba***
7 Am**	Ba***
8 El*****	Ba***
9 Sa***	Be**
10 Da***	Be*****
11 La***	Bi****
12 Ha*****	Bl***
13 Al****	Bu**
14 An*****	Ca****
15 Ge****	Ca*****
16 Na*****	Ca*****
17 Jo**	Ch**
18 Ke***	Ch***