

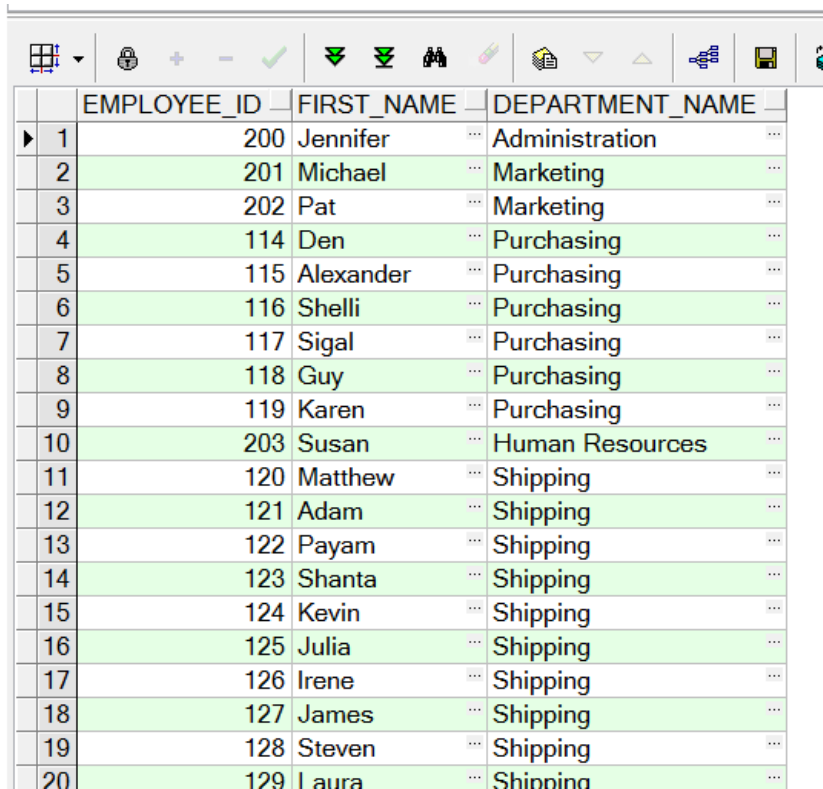
<b>Topic</b>	Oracle SQL Language Fundamentals I
<b>Document Name</b>	SQL01-EX-01-05
	Enes Tahtacı

## Oracle SQL Language Fundamentals I

### 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.)

**Sample Output :**



	EMPLOYEE_ID	FIRST_NAME	DEPARTMENT_NAME
1	200	Jennifer	Administration
2	201	Michael	Marketing
3	202	Pat	Marketing
4	114	Den	Purchasing
5	115	Alexander	Purchasing
6	116	Shelli	Purchasing
7	117	Sigal	Purchasing
8	118	Guy	Purchasing
9	119	Karen	Purchasing
10	203	Susan	Human Resources
11	120	Matthew	Shipping
12	121	Adam	Shipping
13	122	Payam	Shipping
14	123	Shanta	Shipping
15	124	Kevin	Shipping
16	125	Julia	Shipping
17	126	Irene	Shipping
18	127	James	Shipping
19	128	Steven	Shipping
20	129	Laura	Shipping

**Objectives :** To learn relations on tables and SQL language keyword JOIN.

**Exercise Keywords:** INNER JOIN, JOIN.

**Screenshot:**

Worksheet		Query Builder	
		<pre>-- SQL01-EX-01 SELECT e.employee_id, e.first_name, d.department_name FROM EMPLOYEES e JOIN departments d ON department_name = d.department_name;</pre>	
		Query Result x	
		SQL   Fetched 50 rows in 0.004 seconds	
	EMPLOYEE_ID	FIRST_NAME	DEPARTMENT_NAME
1	100	Steven	Administration
2	101	Neena	Administration
3	102	Lex	Administration
4	103	Alexander	Administration
5	104	Bruce	Administration
6	105	David	Administration
7	106	Valli	Administration
8	107	Diana	Administration
9	108	Nancy	Administration
10	109	Daniel	Administration
11	110	John	Administration
12	111	Ismael	Administration
13	112	Jose Manuel	Administration

### Exercise SQL01-EX-02:

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

**Sample Output :**

	Employee ID	Manager ID
1	101	100
2	102	100
3	103	102
4	104	103
5	105	103
6	106	103
7	107	103
8	108	101
9	109	108
10	110	108

**Objectives :** To learn SQL join logic like SELF JOIN.

**Screenshot:**

The screenshot displays a SQL IDE interface. The top toolbar includes icons for running queries, saving, and editing. Below the toolbar, there are tabs for 'Worksheet' and 'Query Builder'. The 'Worksheet' tab is active, showing a SQL query:

```
-- SQL01-EX-02
SELECT employee_id, manager_id
FROM employees;
```

Below the query editor, there is a 'Query Result' tab. It shows the results of the query, indicating that 50 rows were fetched in 0.003 seconds. The results are displayed in a table with two columns: 'EMPLOYEE\_ID' and 'MANAGER\_ID'.

	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

### 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)

**Sample Output :**

	Operator	Total
1	515	21
2	590	5
3	603	1
4	011	35
5	650	45

	515	590	603	011	650
1	21	5	1	35	45

**Objectives :** To learn basic SQL keywords like COUNT, SUM, CASE.

**Screenshot:**



**Objectives :** To learn basic SQL keywords like INSERT, UPDATE, DELETE, DROP and CREATE TABLE from table.

**Screenshot:**

```
-- SQL01-EX-04
CREATE TABLE emp AS
SELECT * FROM employees;
SELECT * FROM EMP;

DELETE FROM EMP
WHERE employee_id > 1;

INSERT INTO emp (
employee_id,
first_name,
last_name,
email,
phone_number,
hire_date,
job_id,
salary,
commission_pct,
manager_id,
department_id
)
VALUES(
12,
'enes',
'tahtaci',
'enes@gmail.com',
555.333.6644,
17-JUN-03,
IT_PROG,
68000,
(null),
100,
)
```

Query Result x | Query Result 1 x | Script Output x | Query Result 2 x

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
1	enes	tahtaci	enes@gmail.com	555.333.6644	17-JUN-03	IT_PROG	68000	(null)	100

## Exercise SQL01-EX-05:

**Definiton :**

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

CUSTOMERNAME
NEŞET BEKTAŞ
HASAN YARIN
HÜSEYİN ÖZLEMİŞ
YILMAZ YÜCER
MEHMET ŞERİF KURT
LEVENT HACIOĞLU
HASAN YAMAN
ÖZGÜR KANŞIRAY
YAKUP HÜSEYİN HIÇKIRAN
HÜLYA BALTUTAN
ŞİAWASH ABDULQAYOM
NERİMAN ÇİÇEKÇİ

**Sample Output :**

CUSTOMERNAME
Ha*** Ya***
Ga*** Ke*****
Me***** At***
Za*** Ze*****
Pi Ka**

**Objectives :** To learn basic SQL functions like length, substr, instr, trim, initcap, rpad, lpad, regexp\_replace, regexp\_substr

**Screenshot:**

Worksheet Query Builder

```
-- SQL01-EX-05
SELECT CONCAT(RPAD(SUBSTR(first_name,1,2),5,' '),
              RPAD(SUBSTR(last_name,1,2),5,' ')) AS customername
FROM employees;
```

Query Result x Query Result 1 x Script Output x Query Result 2 x Query Result 3 x

SQL | Fetched 50 rows in 0 seconds

	CUSTOMERNAME
1	St***Ki***
2	Ne***Ko***
3	Le***De***
4	Al***Hu***
5	Br***Er***
6	Da***Au***
7	Va***Pa***
8	Di***Lo***
9	Na***Gr***