

# i2i Academy

## Training Document

<b>Topic</b>	Oracle SQL Language Fundamentals I
<b>Document Name</b>	SQL02-EX-01-05

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## Exercise SQL02-EX-01:

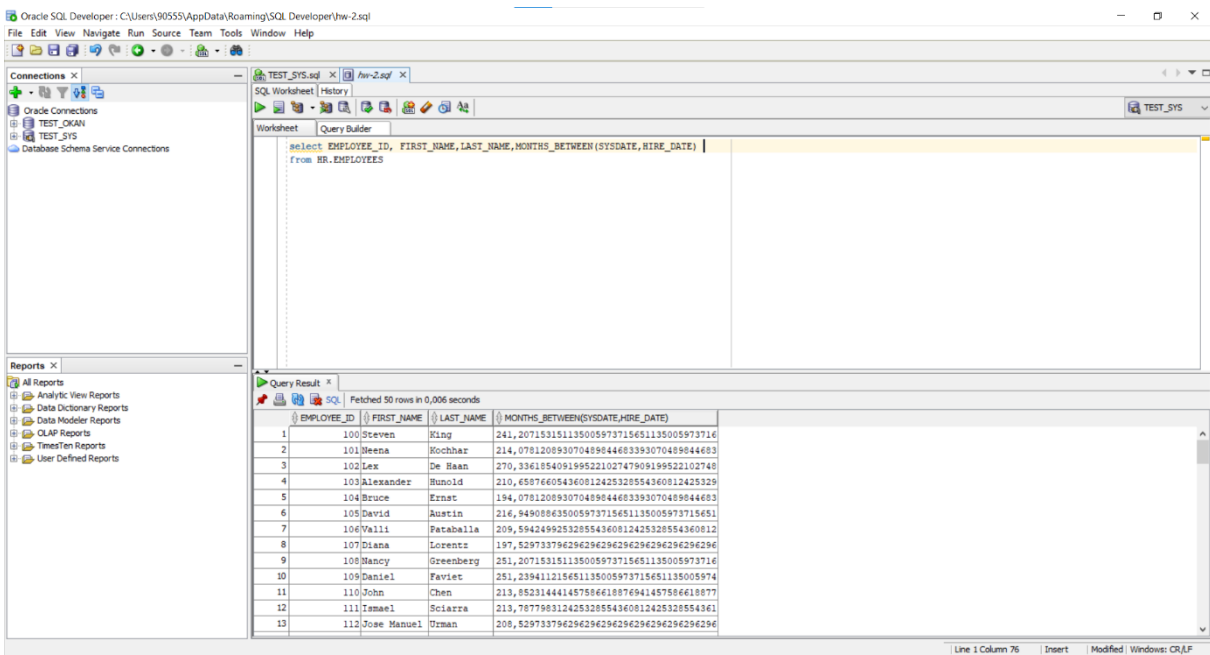
**Definiton :** Write an SQL query that selects employee's id, employee's first name, employee's last name and employee's **number of months** from hire\_date to today for all employees.

(Hint:MONTHS\_BETWEEN)

**SQL:**

```
SELECT EMPLOYEE_ID,
FIRST_NAME,
LAST_NAME,
MONTHS_BETWEEN(SYSDATE,HIRE_DATE)
FROM HR.EMPLOYEES
```

**Screenshot:**



The screenshot shows the Oracle SQL Developer interface. The main window displays the following SQL query:

```
select EMPLOYEE_ID, FIRST_NAME, LAST_NAME, MONTHS_BETWEEN(SYSDATE, HIRE_DATE)
from HR.EMPLOYEES
```

The Query Result pane shows the following data:

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	MONTHS_BETWEEN(SYSDATE, HIRE_DATE)
1	100	Steven	King	241,207153151135005973715651135005973716
2	101	Neena	Kochhar	214,078120893070489844683393070489844683
3	102	Lex	De Baan	270,336185409199522102747909199522102748
4	103	Alexander	Bunold	210,658766054360812425328554360812425328
5	104	Bruce	Ernst	194,078120893070489844683393070489844683
6	105	David	Austin	216,949088635005973715651135005973715651
7	106	Valli	Pataballa	209,594249925328554360812425328554360812
8	107	Diana	Lorents	197,529733796296296296296296296296296
9	108	Nancy	Greenberg	251,207153151135005973715651135005973716
10	109	Daniel	Faviet	251,239411215651135005973715651135005974
11	110	John	Chen	213,852314441457586618876941457586618877
12	111	Jamuel	Sciarra	213,787798312425328554360812425328554361
13	112	Jose Manuel	Urman	208,529733796296296296296296296296296

### Exercise SQL02-EX-02:

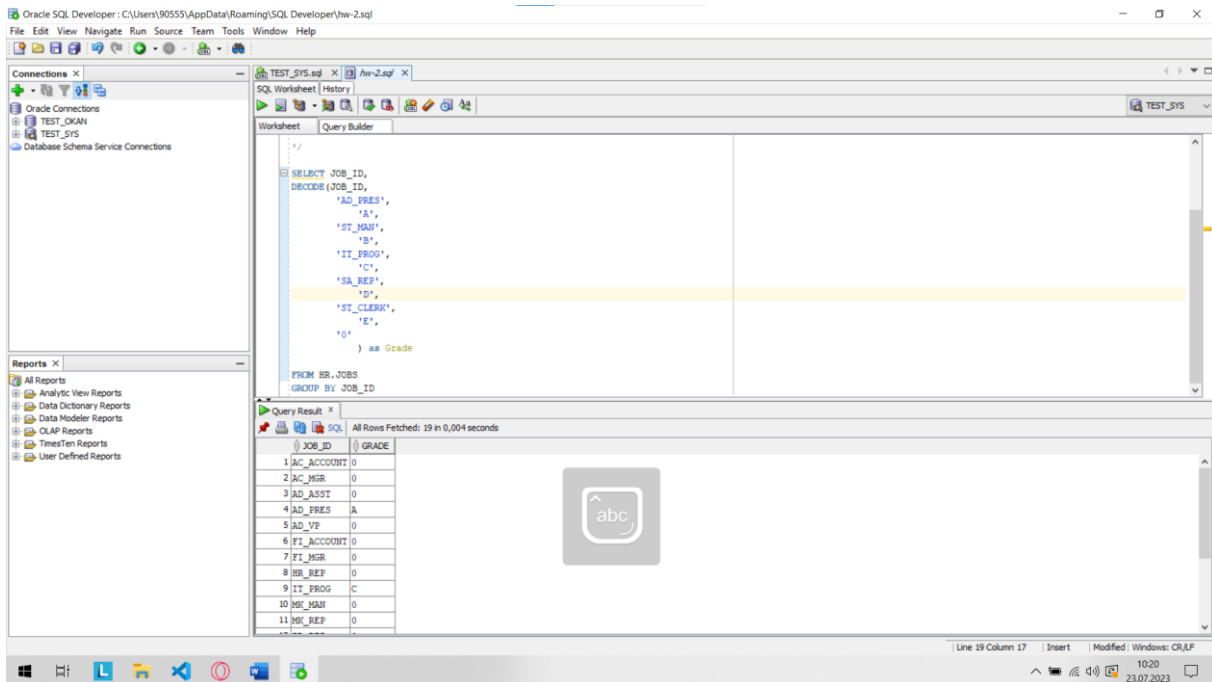
**Definiton :** Write a query that displays the grade of all employees based on the value of the column JOB\_ID, using the following data: (Use DECODE)

Job	Grade
AD_PRES	A
ST_MAN	B
IT_PROG	C
SA_REP	D
ST_CLERK	E
None of the above	0

**SQL:**

```
SELECT JOB_ID,  
       DECODE(JOB_ID,  
              'AD_PRES',  
              'A',  
              'ST_MAN',  
              'B',  
              'IT_PROG',  
              'C',  
              'SA_REP',  
              'D',  
              'ST_CLERK',  
              'E',  
              '0'  
              ) as Grade  
FROM HR.JOBS  
GROUP BY JOB_ID
```

## Screenshot:



## Exercise SQL02-EX-03:

**Definiton :** Write a query for SQL02-EX-02(previous question) with using **CASE WHEN**.

**SQL:**

SELECT JOB\_ID,

CASE JOB\_ID

WHEN 'AD\_PRES' THEN 'A'

WHEN 'ST\_MAN' THEN 'B'

WHEN 'IT\_PROG' THEN 'C'

WHEN 'SA\_REP' THEN 'D'

WHEN 'ST\_CLERK' THEN 'E'

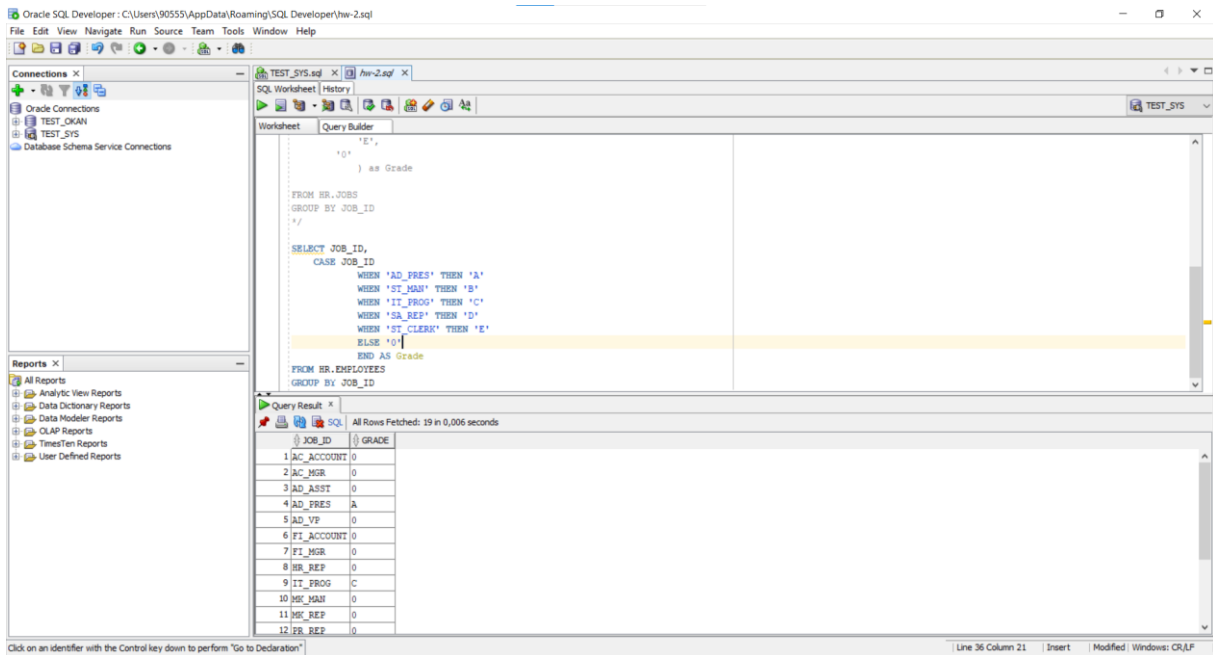
ELSE '0'

END AS Grade

FROM HR.EMPLOYEES

GROUP BY JOB\_ID

## Screenshot:



The screenshot shows the Oracle SQL Developer interface. The main window displays a SQL query in the Worksheet tab. The query is as follows:

```

-- 'E'
-- ) as Grade

FROM HR_JOBS
GROUP BY JOB_ID
*/

SELECT JOB_ID,
CASE JOB_ID
WHEN 'AD_FRES' THEN 'A'
WHEN 'ST_MGR' THEN 'B'
WHEN 'IT_PROG' THEN 'C'
WHEN 'SA_REP' THEN 'D'
WHEN 'ST_CLERK' THEN 'E'
ELSE 'D'
END AS Grade
FROM HR.EMPLOYEES
GROUP BY JOB_ID

```

The Query Result tab shows the following data:

JOB_ID	GRADE
1 AC_ACCOUNT	0
2 AC_MGR	0
3 AD_ASST	0
4 AD_FRES	A
5 AD_VF	0
6 FI_ACCOUNT	0
7 FI_MGR	0
8 HR_REP	0
9 IT_PROG	C
10 MGR_MGR	0
11 MGR_REP	0
12 PR_REP	0

The status bar at the bottom indicates: Line 36 Column 21 | Insert | Modified | Windows: CR,LF

## Exercise SQL02-EX-04:

**Definiton :** Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains a "i".

**SQL:**

```
SELECT EMPLOYEE_ID, LAST_NAME
```

```
FROM HR.EMPLOYEES
```

```
WHERE DEPARTMENT_ID IN(
```

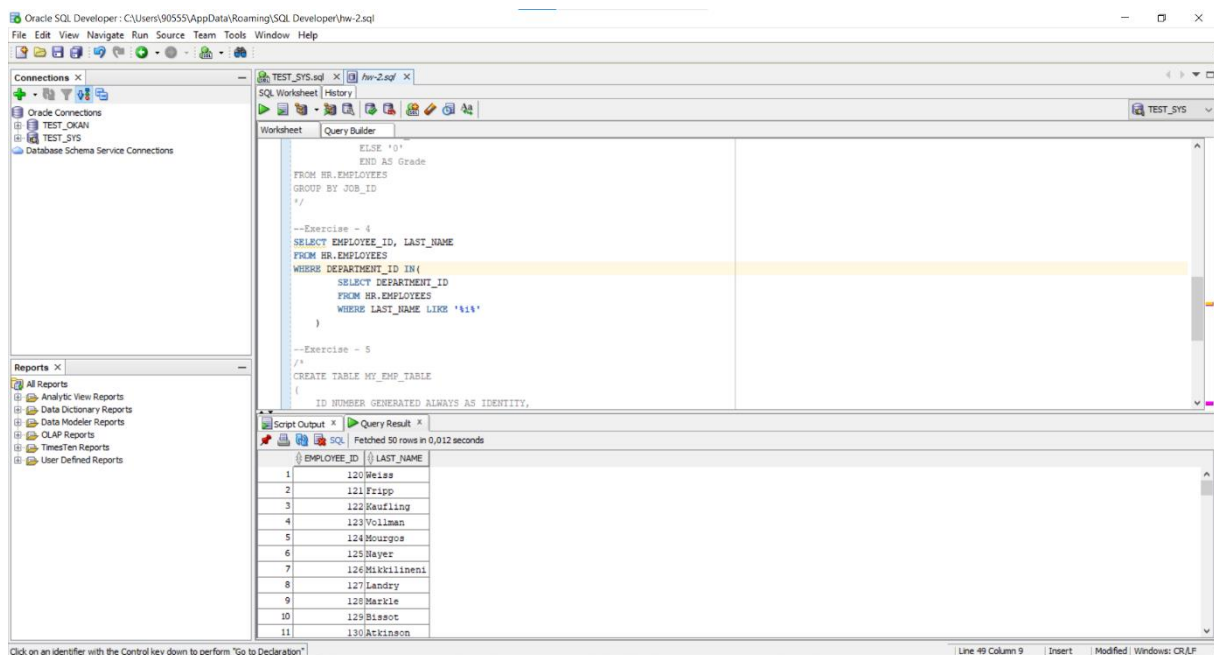
```
    SELECT DEPARTMENT_ID
```

```
    FROM HR.EMPLOYEES
```

```
    WHERE LAST_NAME LIKE '%i%'
```

```
)
```

**Screenshot:**



The screenshot shows the Oracle SQL Developer interface. The main window displays a SQL script with the following content:

```
ELSE '0'  
END AS Grade  
FROM HR.EMPLOYEES  
GROUP BY JOB_ID  
*/  
  
--Exercise - 4  
SELECT EMPLOYEE_ID, LAST_NAME  
FROM HR.EMPLOYEES  
WHERE DEPARTMENT_ID IN(  
    SELECT DEPARTMENT_ID  
    FROM HR.EMPLOYEES  
    WHERE LAST_NAME LIKE '%i%'  
)  
  
--Exercise - 5  
/*  
CREATE TABLE MY_EMP_TABLE  
(  
    ID NUMBER GENERATED ALWAYS AS IDENTITY,  
    ...  
)
```

The query results are displayed in the 'Query Result' tab, showing 11 rows of data:

EMPLOYEE_ID	LAST_NAME
1	120Weiss
2	121Fripp
3	122Kaufling
4	123Vollman
5	124Mourgos
6	125Mayer
7	126Mikkilineni
8	127Landry
9	128Markle
10	129Blassot
11	130Atkinson

## Exercise SQL02-EX-05:

### Definiton :

- Create a table for MY\_EMP\_TABLE with following columns
- Insert following rows,
- Update salary with 1.10 times of salary value
- Delete rows which first\_name is David
- Truncate table.

ID	LAST_NAME	FIRST_NAME	SALARY
1	Black	John	1100
2	White	Kent	1300
3	Orange	David	1700
4	Pink	Alissa	1900

### SQL:

```
CREATE TABLE MY_EMP_TABLE
```

```
(
```

```
    ID NUMBER GENERATED ALWAYS AS IDENTITY,
```

```
    LAST_NAME VARCHAR(30) NOT NULL,
```

```
    FIRS_NAME VARCHAR(40) NOT NULL,
```

```
    SALARY NUMBER NOT NULL
```

```
)
```

```
INSERT INTO MY_EMP_TABLE (LAST_NAME, FIRST_NAME, SALARY)
```

```
VALUES ('Black','John',1100),
```

```
      ('White','Kent',1300),
```

```
      ('Orange','Devid',1700);
```

UPDATE MY\_EMP\_TABLE SET SALARY = SALARY \* 1.10 WHERE ID=2

DELETE FROM MY\_EMP\_TABLE WHERE FIRST\_NAME = 'Devid'

DROP TABLE MY\_EMP\_TABLE

### Screenshot:

