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innovation to integration

i2i Academy

Topic	Oracle SQL Language Fundamentals I
Document Name	SQL02-EX-01-05

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(
    TO_DATE(SYSDATE, 'DD-MM-YYYY'),
    TO_DATE(hire_date, 'DD-MM-YYYY')
) as number_of_months
FROM HR.employees
```

Screenshot:

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	NUMBER_OF_MONTHS
100	Steven	King	241.22580645161290322580645161290322580 6
101	Neena	Kochhar	214.096774193548387096774193548387096774
102	Lex	De Haan	270.354838709677419354838709677419354839
103	Alexander	Hunold	210.67741935483870967741935483870967741 9
104	Bruce	Ernst	194.096774193548387096774193548387096774
105	David	Austin	216.967741935483870967741935483870967742
106	Valli	Pataballa	209.612903225806451612903225806451612903
107	Diana	Lorentz	197.548387096774193548387096774193548387
108	Nancy	Greenberg	251.22580645161290322580645161290322580 6
109	Daniel	Faviet	251.25806451612903225806451612903225806 5
110	John	Chen	213.870967741935483870967741935483870968
111	Ismael	Sciarra	213.80645161290322580645161290322580645 2

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 first_name, last_name, 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.employees;
```

Screenshot:

Jennifer	Whalen	AD_ASST	0
Steven	King	AD_PRES	A
Neena	Kochhar	AD_VP	0
Lex	De Haan	AD_VP	0
Daniel	Faviet	FI_ACCOUNT	0
John	Chen	FI_ACCOUNT	0
Ismael	Sciarra	FI_ACCOUNT	0
Jose Manuel	Urman	FI_ACCOUNT	0
Luis	Popp	FI_ACCOUNT	0
Nancy	Greenberg	FI_MGR	0
Susan	Mavris	HR_REP	0
Alexander	Hunold	IT_PROG	C
Bruce	Ernst	IT_PROG	C

Exercise SQL02-EX-03:

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

SQL:

```
SELECT first_name, last_name, 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;
```

Screenshot:

Steven	King	AD_PRES	A
Neena	Kochhar	AD_VP	0
Lex	De Haan	AD_VP	0
Daniel	Faviet	FI_ACCOUNT	0
John	Chen	FI_ACCOUNT	0
Ismael	Sciarra	FI_ACCOUNT	0
Jose Manuel	Urman	FI_ACCOUNT	0
Luis	Popp	FI_ACCOUNT	0
Nancy	Greenberg	FI_MGR	0
Susan	Mavris	HR_REP	0
Alexander	Hunold	IT_PROG	C
Bruce	Ernst	IT_PROG	C

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 last_name LIKE '%i%';
```

Screenshot:

EMPLOYEE_ID	LAST_NAME
130	Atkinson
105	Austin
116	Baida
151	Bernstein
129	Bissot
187	Cabrio
142	Davies
186	Dellinger
189	Dilly
147	Errazuriz
109	Faviet
121	Fripp
183	Geoni

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(1),
    last_name VARCHAR(10),
    first_name VARCHAR(10),
    salary NUMBER(5)
);

INSERT ALL
    INTO my_emp_table VALUES (1, 'Black', 'John', 1100)
    INTO my_emp_table VALUES (2, 'White', 'Kent', 1300)
    INTO my_emp_table VALUES (3, 'Orange', 'David', 1700)
    INTO my_emp_table VALUES (4, 'Pink', 'Alissa', 1900)
    SELECT 1 FROM dual;
```

```
UPDATE my_emp_table
SET salary = salary * 1.1;

DELETE FROM my_emp_table
WHERE first_name = 'David';

TRUNCATE TABLE my_emp_table;
```

Screenshot:

```
Table created.

4 row(s) inserted.

4 row(s) updated.

1 row(s) deleted.

Table truncated.
```