UNIVERSIDAD AUTÓNOMA DE ZACATECAS
INGENIERÍA DE SOFTWARE
LABORATORIO DE SISTEMAS DE BASE DE DATOS II
FORMATO DE PRÁCTICAS

PRÁCTICA:	**7**
TITULO:	**Using Conversion Functions and Conditional Expressions**
OBJETIVO:	**Realizar ejercicios sobre los temas del capítulo 4: Using Conversion Functions and Conditional Expressions**
DURACIÓN:	**4 horas**
FECHA:	
FECHA DE ENTREGA:	

ACTIVIDADES A REALIZAR:

Practices for Lesson 4

This practice provides a variety of exercises using TO_CHAR and TO_DATE functions, and conditional expressions such as DECODE and CASE. Remember that for nested functions, the results are evaluated from the innermost function to the outermost function.

Practice 4-1: Using Conversion Functions and Conditional Expressions

1) Create a report that produces the following for each employee: `<employee last name>` earns `<salary> monthly but wants <3 times salary.>`. Label the column `Dream Salaries`.

	Dream Salaries
1	Whalen earns $4,400.00 monthly but wants $13,200.00.
2	Hartstein earns $13,000.00 monthly but wants $39,000.00.
3	Fay earns $6,000.00 monthly but wants $18,000.00.
4	Higgins earns $12,000.00 monthly but wants $36,000.00.
5	Gietz earns $8,300.00 monthly but wants $24,900.00.

...

19	Taylor earns $8,600.00 monthly but wants $25,800.00.
20	Grant earns $7,000.00 monthly but wants $21,000.00.

2) Display each employee's last name, hire date, and salary review date, which is the first Monday after six months of service. Label the column REVIEW. Format the dates to appear in the format similar to "Monday, the Thirty-First of July, 2000."

	LAST_NAME	HIRE_DATE	REVIEW
1	Whalen	17-SEP-87	Monday, the Twenty-First of March, 1988
2	Hartstein	17-FEB-96	Monday, the Nineteenth of August, 1996
3	Fay	17-AUG-97	Monday, the Twenty-Third of February, 1998
4	Higgins	07-JUN-94	Monday, the Twelfth of December, 1994
5	Gietz	07-JUN-94	Monday, the Twelfth of December, 1994

...

19	Taylor	24-MAR-98	Monday, the Twenty-Eighth of September, 1998
20	Grant	24-MAY-99	Monday, the Twenty-Ninth of November, 1999

3) Display the last name, hire date, and day of the week on which the employee started. Label the column DAY. Order the results by the day of the week, starting with Monday.

	LAST_NAME	HIRE_DATE	DAY
1	Grant	24-MAY-99	MONDAY
2	Ernst	21-MAY-91	TUESDAY
3	Taylor	24-MAR-98	TUESDAY
4	Rajs	17-OCT-95	TUESDAY
5	Mourgos	16-NOV-99	TUESDAY

...

19	Matos	15-MAR-98	SUNDAY
20	Fay	17-AUG-97	SUNDAY

4) Create a query that displays the employees' last names and commission amounts. If an employee does not earn commission, show "No Commission." Label the column COMM.

	LAST_NAME	COMM
1	Whalen	No Commission
2	Hartstein	No Commission
3	Fay	No Commission
4	Higgins	No Commission
5	Gietz	No Commission

...

16	Vargas	No Commission
17	Zlotkey	.2
18	Abel	.3
19	Taylor	.2
20	Grant	.15

If you have time, complete the following exercises:

5) Using the DECODE function, write a query that displays the grade of all employees based on the value of the column JOB_ID, using the following data:

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

	JOB_ID	GRADE
1	AC_ACCOUNT	0
2	AC_MGR	0
3	AD_ASST	0
4	AD_PRES	A
5	AD_VP	0
6	AD_VP	0
7	IT_PROG	C

...

14	SA_REP	D
15	SA_REP	D

...

19	ST_CLERK	E
20	ST_MAN	B

6) Rewrite the statement in the preceding exercise by using the CASE syntax.

	JOB_ID	GRADE
1	AC_ACCOUNT	0
2	AC_MGR	0
3	AD_ASST	0
4	AD_PRES	A
5	AD_VP	0
6	AD_VP	0
7	IT_PROG	C

...

14	SA_REP	D
15	SA_REP	D

...

19	ST_CLERK	E
20	ST_MAN	B

Actividad 2:

Describe Various Types of Conversion Functions Available in SQL

1. What type of conversion is performed by the following statement?

SELECT LENGTH(3.14285) FROM DUAL;

(Choose the best answer.)

A. Explicit conversion

B. Implicit conversion

C. TO_NUMBER function conversion

D. None of the above

2. Choose any incorrect statements regarding conversion functions. (Choose all that apply.)

A. TO_CHAR may convert date items to character items.

B. TO_DATE may convert character items to date items.

C. TO_CHAR may convert numbers to character items.

D. TO_DATE may convert date items to character items.

Use the TO_CHAR,TO_NUMBER, and TO_DATE Conversion Functions

3. What value is returned after executing the following statement?

SELECT TO_NUMBER(1234.49, '999999.9') FROM DUAL;

(Choose the best answer.)

A. 1234.49

B. 001234.5

C. 1234.5

D. None of the above

4. What value is returned after executing the following statement?

SELECT TO_CHAR(1234.49, '999999.9') FROM DUAL;

(Choose the best answer.)

A. 1234.49

B. 001234.5

C. 1234.5

D. None of the above

5. If SYSDATE returns 12-JUL-2009, what is returned by the following statement?

SELECT TO_CHAR(SYSDATE, 'fmMONTH, YEAR') FROM DUAL;

(Choose the best answer.)

A. JUL, 2009

B. JULY, TWO THOUSAND NINE

C. JUL-09

D. None of the above

6. If SYSDATE returns 12-JUL-2009, what is returned by the following statement?

SELECT TO_CHAR(SYSDATE, 'fmDDth MONTH') FROM DUAL;

(Choose the best answer.)

A. 12TH JULY

B. 12th July

C. TWELFTH JULY

D. None of the above

Apply Conditional Expressions in a SELECT Statement

7. If SYSDATE returns 12-JUL-2009, what is returned by the following statement?

SELECT TO_CHAR(TO_DATE(TO_CHAR(SYSDATE,'DD'),'DD'),'YEAR') FROM DUAL;

(Choose the best answer.)

A. 2009

B. TWO THOUSAND NINE

C. 12-JUL-2009

D. None of the above

8. What value is returned after executing the following statement?

SELECT NVL2(NULLIF('CODA','SID'),'SPANIEL','TERRIER') FROM DUAL;

(Choose the best answer.)

A. SPANIEL

B. TERRIER

C. NULL

D. None of the above

9. What value is returned after executing the following statement?

SELECT NVL(SUBSTR('AM I NULL',10),'YES I AM') FROM DUAL;

(Choose the best answer.)

A. NO

B. NULL

C. YES I AM

D. None of the above

10. If SYSDATE returns 12-JUL-2009, what is returned by the following statement?

SELECT DECODE(TO_CHAR(SYSDATE,'MM'),'02','TAX DUE','PARTY') FROM DUAL;

(Choose the best answer.)

A. TAX DUE

B. PARTY

C. 02

D. None of the above

Ejercicio 3: Para la base de datos "Hotel"

Elaborar 10 sentencias SELECT que utilicen la función TO_CHAR para fechas.
Elaborar 10 sentencias SELECT que utilicen la función TO_CHAR para Números.
Elaborar 10 sentencias SELECT que utilicen la función TO_DATE.
Elaborar 10 sentencias SELECT que utilicen la función TO_NUMBER.
Elaborar 10 sentencias SELECT que utilicen funciones anidadas.
Elaborar 5 sentencias SELECT para cada una de las funciones GENERALES
Elaborar 5 sentencias SELECT que utilicen la expresión CASE.
Elaborar 5 sentencias SELECT que utilicen la función DECODE.