Practices for Lesson 5: Using Conversion Functions and Conditional Expressions

Chapter 5

Practices for Lesson 5: Overview

Practice Overview

This practice covers the following topics:

- Creating queries that use the `TO_CHAR` and `TO_DATE` functions
- Creating queries that use conditional expressions such as `CASE` , searched `CASE`, and `DECODE`

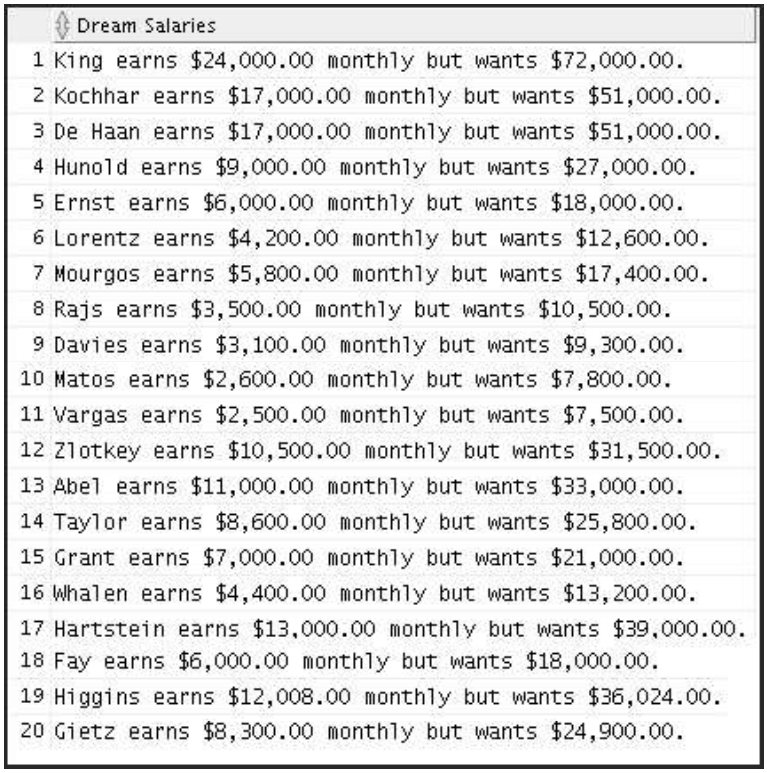
Practice 5-1: Using Conversion Functions and Conditional Expressions

Overview

In this practice, you use the `TO_CHAR` and `TO_DATE` functions, and conditional expressions such as `CASE`, searched `CASE`, and `DECODE`.

Tasks

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	King earns $24,000.00 monthly but wants $72,000.00.
2	Kochhar earns $17,000.00 monthly but wants $51,000.00.
3	De Haan earns $17,000.00 monthly but wants $51,000.00.
4	Hunold earns $9,000.00 monthly but wants $27,000.00.
5	Ernst earns $6,000.00 monthly but wants $18,000.00.
6	Lorentz earns $4,200.00 monthly but wants $12,600.00.
7	Mourgos earns $5,800.00 monthly but wants $17,400.00.
8	Rajs earns $3,500.00 monthly but wants $10,500.00.
9	Davies earns $3,100.00 monthly but wants $9,300.00.
10	Matos earns $2,600.00 monthly but wants $7,800.00.
11	Vargas earns $2,500.00 monthly but wants $7,500.00.
12	Zlotkey earns $10,500.00 monthly but wants $31,500.00.
13	Abel earns $11,000.00 monthly but wants $33,000.00.
14	Taylor earns $8,600.00 monthly but wants $25,800.00.
15	Grant earns $7,000.00 monthly but wants $21,000.00.
16	Whalen earns $4,400.00 monthly but wants $13,200.00.
17	Hartstein earns $13,000.00 monthly but wants $39,000.00.
18	Fay earns $6,000.00 monthly but wants $18,000.00.
19	Higgins earns $12,008.00 monthly but wants $36,024.00.
20	Gietz earns $8,300.00 monthly but wants $24,900.00.

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 a format that is similar to "Monday, the Thirty-First of July, 2000."

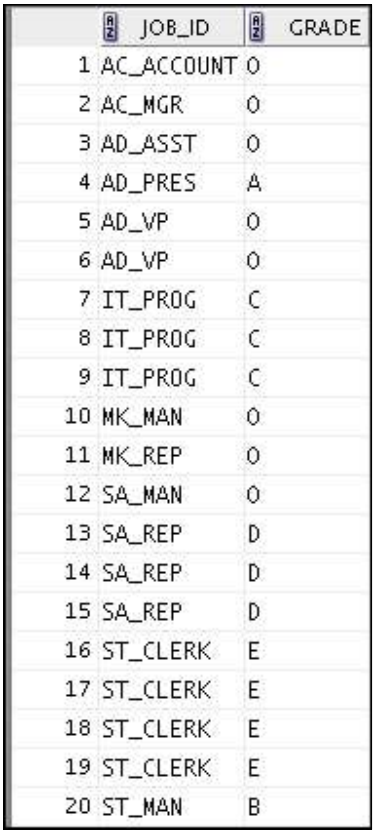
	LAST_NAME	HIRE_DATE	REVIEW
1	King	17-JUN-11	Monday, the Nineteenth of December, 2011
2	Kochhar	21-SEP-09	Monday, the Twenty-Second of March, 2010
3	De Haan	13-JAN-09	Monday, the Twentieth of July, 2009
4	Hunold	03-JAN-14	Monday, the Seventh of July, 2014
5	Ernst	21-MAY-15	Monday, the Twenty-Third of November, 2015
6	Lorentz	07-FEB-15	Monday, the Tenth of August, 2015
7	Mourgos	16-NOV-15	Monday, the Twenty-Third of May, 2016
8	Rajs	17-OCT-11	Monday, the Twenty-Third of April, 2012
9	Davies	29-JAN-13	Monday, the Fifth of August, 2013
10	Matos	15-MAR-14	Monday, the Twenty-Second of September, 2014
11	Vargas	09-JUL-14	Monday, the Twelfth of January, 2015
12	Zlotkey	29-JAN-16	Monday, the First of August, 2016
13	Abel	11-MAY-12	Monday, the Twelfth of November, 2012
14	Taylor	24-MAR-14	Monday, the Twenty-Ninth of September, 2014
15	Grant	24-MAY-15	Monday, the Thirtieth of November, 2015
16	Whalen	17-SEP-11	Monday, the Nineteenth of March, 2012
17	Hartstein	17-FEB-12	Monday, the Twentieth of August, 2012
18	Fay	17-AUG-13	Monday, the Twenty-Fourth of February, 2014
19	Higgins	07-JUN-10	Monday, the Thirteenth of December, 2010
20	Gietz	07-JUN-10	Monday, the Thirteenth of December, 2010

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

	LAST_NAME	COMM
1	King	No Commission
2	Kochhar	No Commission
3	De Haan	No Commission
4	Hunold	No Commission
5	Ernst	No Commission
6	Lorentz	No Commission
7	Mourgos	No Commission
8	Rajs	No Commission
9	Davies	No Commission
10	Matos	No Commission
11	Vargas	No Commission
12	Zlotkey	.2
13	Abel	.3
14	Taylor	.2
15	Grant	.15
16	Whalen	No Commission
17	Hartstein	No Commission
18	Fay	No Commission
19	Higgins	No Commission
20	Gietz	No Commission

4. Using the `CASE` function, write a query that displays the grade of all employees based on the value of the `JOB_ID` column, 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

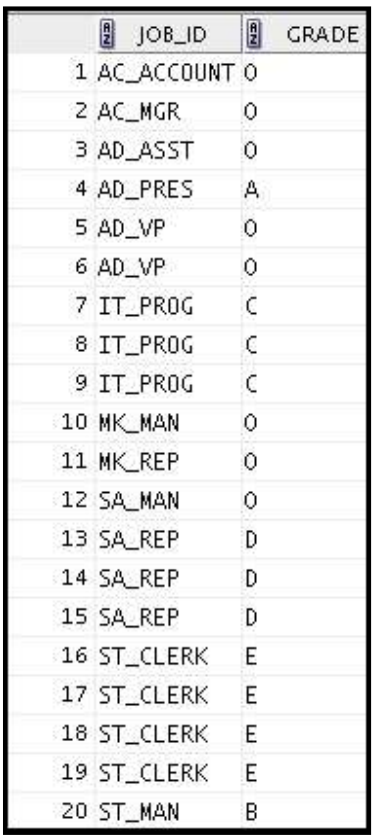


	JOB_ID	GRADE
1	AC_ACCOUNT	0
2	AC_MGR	0
3	AD_ASST	0
4	AD_PRES	A
5	AD_VP	0
6	AD_VP	0
7	IT_PROG	C
8	IT_PROG	C
9	IT_PROG	C
10	MK_MAN	0
11	MK_REP	0
12	SA_MAN	0
13	SA_REP	D
14	SA_REP	D
15	SA_REP	D
16	ST_CLERK	E
17	ST_CLERK	E
18	ST_CLERK	E
19	ST_CLERK	E
20	ST_MAN	B

5. Rewrite the statement in the preceding exercise by using the searched `CASE` syntax.

	JOB_ID	GRADE
1	AC_ACCOUNT	O
2	AC_MGR	O
3	AD_ASST	O
4	AD_PRES	A
5	AD_VP	O
6	AD_VP	O
7	IT_PROG	C
8	IT_PROG	C
9	IT_PROG	C
10	MK_MAN	O
11	MK_REP	O
12	SA_MAN	O
13	SA_REP	D
14	SA_REP	D
15	SA_REP	D
16	ST_CLERK	E
17	ST_CLERK	E
18	ST_CLERK	E
19	ST_CLERK	E
20	ST_MAN	B

6. Rewrite the statement in the preceding exercise by using the `DECODE` syntax.



	JOB_ID	GRADE
1	AC_ACCOUNT	O
2	AC_MGR	O
3	AD_ASST	O
4	AD_PRES	A
5	AD_VP	O
6	AD_VP	O
7	IT_PROG	C
8	IT_PROG	C
9	IT_PROG	C
10	MK_MAN	O
11	MK_REP	O
12	SA_MAN	O
13	SA_REP	D
14	SA_REP	D
15	SA_REP	D
16	ST_CLERK	E
17	ST_CLERK	E
18	ST_CLERK	E
19	ST_CLERK	E
20	ST_MAN	B