**TOPIC 04: Conversion Functions and Conditional Expressions**

**Exercises**

**\*\*\* This exercise is performed on HR Schema (HR database) and on DUAL table\*\*\***

**\*\* This exercise may include some of the topics examined previously\*\***

1. Write a query in SQL to show the usage of the DECODE function (table: dual).

SELECT DECODE(NULL,NULL,'EQUAL','NOT EQUAL') FROM DUAL;

1. Write a query in SQL to group employees in salary grades using the following rules: if salary<200 then grade is 1, if salary is between 200 and 500, then the grade is 2, in all other cases, the grade is 3 (table:employees – using CASE function).

SELECT first\_name, CASE WHEN salary < 200 THEN 'GRADE 1' WHEN salary > 200 AND salary < 5000 THEN 'GRADE 2' ELSE 'GRADE 3' END CASE FROM employees;

1. You are required to retrieve a list of FIRST\_NAME and LAST\_NAME values and an expression based on the HIRE\_DATE column for employees hired on a Saturday. The expression must be aliased as START\_DATE and a HIRE\_DATE value of 17-FEB-1996 must return the following string:Saturday, the 13th of January, Two Thousand One (table: employees).

SELECT first\_name,last\_name,to\_char(hire\_date,'fmDay,"the " ddth "of" Month, Yyyysp.') start\_date FROM employees WHERE to\_char(hire\_date,'fmDay')='Saturday';

1. Using TO\_DATE Function, write SQL query to show first name, last name, and salary of all employees who were hired before 12/01/2008 (table employees).

SELECT first\_name,last\_name,salary FROM employees WHERE

hire\_date<TO\_DATE('12/01/2008','dd/mm/yyyy');

1. Your task is to extract the day and month portion of a date column and compare it with the corresponding components of the current system date. Can such a comparison be performed? (table: dual).

SELECT TO\_CHAR(SYSDATE, 'DD-MON') FROM dual;

1. A report of profit and loss is required with the results displayed as follows: if the amount is negative, it must be enclosed in angle brackets. The amount must be displayed with a leading dollar sign (table: dual).

SELECT TO\_CHAR(-9.232424, '$999999PR') FROM dual;

1. You are asked to input past employee data into the JOB\_HISTORY table from a paper-based source, but the start date information is only available as the year the employee started. Can this value be converted into the first of January of the year? (table: dual).

SELECT TO\_CHAR(TO\_DATE('2000','YYYY'),'MM/DD/YYYY') FROM dual;