4.3.1. Use Oracle's Timestamp and Time Zone Datatypes

a) Describe the default display formats of the result returned by the following SQL query.

SELECT col\_date, col\_timestamp, col\_timestamp\_w\_tz

FROM date\_example

COL\_DATE COL\_TIMESTAMP COL\_TIMESTAMP\_W\_TZ

--------- ---------------------------- ------------------

24-MAR-02 24-MAR-02 04.25.32.000000 PM 24-MAR-02 04.25.32.000000

PM -05:00

1 row selected.

b) Explain the result of the following SELECT statement. Are there alternate ways to

rewrite the query's WHERE clause?

SELECT col\_timestamp

FROM date\_example

WHERE col\_timestamp = '24-MAR-02 04.25.32.000000 PM'

COL\_TIMESTAMP

----------------------------

24-MAR-02 04.25.32.000000 PM

1 row selected.

c) What function can you utilize to display the seconds component of a TIMESTAMP

datatype column?

d) What do you observe about the text literal of the following query's WHERE clause?

SELECT col\_timestamp\_w\_tz

FROM date\_example

WHERE col\_timestamp\_w\_tz = '24-MAR-02 04.25.32.000000 PM -05:00'

COL\_TIMESTAMP\_W\_TZ

-----------------------------------

24-MAR-02 04.25.32.000000 PM -05:00

1 row selected.

e) The following sets of SQL statements are issued against the database server. Explain

the results.

SELECT SESSIONTIMEZONE

FROM dual

SESSIONTIMEZONE

---------------

-05:00

1 row selected

SELECT col\_timestamp\_w\_tz, col\_timestamp\_w\_local\_tz

FROM date\_example

COL\_TIMESTAMP\_W\_TZ COL\_TIMESTAMP\_W\_LOCAL\_TZ

----------------------------------- ------------------------

24-MAR-02 04.25.32.000000 PM -05:00 24-MAR-02 04.25.32.000000 PM

1 row selected.

ALTER SESSION SET TIME\_ZONE = '-8:00'

Session altered.

SELECT col\_timestamp\_w\_tz, col\_timestamp\_w\_local\_tz

FROM date\_example

COL\_TIMESTAMP\_W\_TZ COL\_TIMESTAMP\_W\_LOCAL\_TZ

----------------------------------- ------------------------

24-MAR-02 04.25.32.000000 PM -05:00 24-MAR-02 01.25.32.000000 PM

1 row selected.

ALTER SESSION SET TIME\_ZONE = '-5:00'

Session altered