Cesar A. Santiago

COP4710

2-1

1 CREATE TABLE Cust(cnum CHAR(3),

2 address VARCHAR2(20),

3\* balance NUMBER(5))

SQL> /

Table created.

SQL> INSERT INTO Cust

2 VALUES ('101', '101st St', 200);

1 row created.

1 INSERT INTO Cust

2\* VALUES('102', '102st St.', 500)

SQL> /

1 row created.

1 INSERT INTO Cust

2\* VALUES('103', '103st St.', 1000)

SQL> /

1 row created.

1 INSERT INTO Cust

2\* VALUES('104', '104st St.', 1500)

SQL> /

1 row created.

1 INSERT INTO Cust

2\* VALUES('105', '105st St.', 2000)

SQL> /

1 row created.

SQL> SELECT \*

2 FROM Cust;

CNUM ADDRESS

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

BALANCE

----------

101 101st St.

200

102 102st St.

500

103 103st St.

1000

CNUM ADDRESS

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

BALANCE

----------

104 104st St.

1500

105 105st St.

2000

2-2

SQL> SELECT \*

2 FROM Cust

3 ORDER BY balance DESC;

CNUM ADDRESS

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

BALANCE

----------

105 105st St.

2000

104 104st St.

1500

103 103st St.

1000

CNUM ADDRESS

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

BALANCE

----------

102 102st St.

500

101 101st St.

200

2-3

SQL> SELECT sname, major, class

2 FROM Student

3 WHERE class <= 2

4 ORDER BY class DESC;

SNAME MAJOR

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

CLASS

----------

Brenda COSC

2

Sebastian ACCT

2

Smithly ENGL

2

SNAME MAJOR

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

CLASS

----------

Alan COSC

2

Cedric ENGL

2

Jessica POLY

2

SNAME MAJOR

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

CLASS

----------

Sadie MATH

2

Harley POLY

2

Reva MATH

2

SNAME MAJOR

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

CLASS

----------

Jake MATH

2

George POLY

1

Lindsay UNKN

1

SNAME MAJOR

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

CLASS

----------

Hillary1 COSC

1

Lynette POLY

1

Fraiser POLY

1

SNAME MAJOR

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

CLASS

----------

Lineas ENGL

1

Brad COSC

1

Lujack COSC

1

SNAME MAJOR

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

CLASS

----------

Richard ENGL

1

Steve ENGL

1

Elainie COSC

1

21 rows selected.

2-4

SQL> SELECT balance

2 FROM Cust

3 WHERE balance > 400

4 ORDER BY balance;

BALANCE

----------

500

1000

1500

2000

2-5

SQL> CREATE TABLE Cust1

2 (cnum CHAR(3), bal NUMBER(5));

Table created.

SQL> INSERT INTO Cust1

2 SELECT cnum, balance

3 FROM Cust;

5 rows created.

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

101 200

102 500

103 1000

104 1500

105 2000

SQL> COMMIT;

Commit complete.

SQL> DELETE FROM Cust1

2 WHERE bal < 1000;

2 rows deleted.

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

103 1000

104 1500

105 2000

SQL> ROLLBACK;

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

101 200

102 500

103 1000

104 1500

105 2000

SQL> DELETE FROM Cust1 WHERE cnum = 103;

1 row deleted.

SQL> SAVEPOINT point1;

Savepoint created.

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

101 200

102 500

104 1500

105 2000

SQL> DELETE FROM Cust1

2 WHERE cnum = 105;

1 row deleted.

SQL> SAVEPOINT point2;

Savepoint created.

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

101 200

102 500

104 1500

SQL> ROLLBACK TO SAVEPOINT point1;

Rollback complete.

SQL> SELECT \* FROM Cust1;

CNUM BAL

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

101 200

102 500

104 1500

105 2000

SQL> ROLLBACK TO SAVEPOINT point2;

ROLLBACK TO SAVEPOINT point2

\*

ERROR at line 1:

ORA-01086: savepoint 'POINT2' never established in this session or is invalid

2-6

SQL> COMMIT;

Commit complete.

SQL> ALTER TABLE Cust1

2 ADD date\_opened DATE;

Table altered.

SQL> UPDATE Cust1

2 SET date\_opened = '01-JAN-19'

3 ;

4 rows updated.

SQL> COMMIT;

Commit complete.

SQL> UPDATE Cust1

2 SET bal = 0;

4 rows updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 0 01-JAN-19

102 0 01-JAN-19

104 0 01-JAN-19

105 0 01-JAN-19

SQL> ROLLBACK;

Rollback complete.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 01-JAN-19

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> UPDATE Cust1

2 SET date\_opened = '21-OCT-20'

3 WHERE cnum = 101;

1 row updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> ALTER TABLE Cust1

2 MODIFY bal NUMBER(8,2);

Table altered.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> UPDATE Cust1

2 SET bal = 888.88

3 WHERE cnum = 104;

1 row updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 888.88 01-JAN-19

105 2000 01-JAN-19

SQL> ALTER TABLE Cust1

2 MODIFY bal NUMBER(3,2);

MODIFY bal NUMBER(3,2)

\*

ERROR at line 2:

ORA-01440: column to be modified must be empty to decrease precision or scale

SQL> UPDATE Cust1

2 SET date\_opened = sysdate;

4 rows updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 05-FEB-18

102 500 05-FEB-18

104 888.88 05-FEB-18

105 2000 05-FEB-18 SQL> COMMIT;

Commit complete.

SQL> ALTER TABLE Cust1

2 ADD date\_opened DATE;

Table altered.

SQL> UPDATE Cust1

2 SET date\_opened = '01-JAN-19'

3 ;

4 rows updated.

SQL> COMMIT

2 ;

Commit complete.

SQL> UPDATE Cust1

2 SET bal = 0;

4 rows updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 0 01-JAN-19

102 0 01-JAN-19

104 0 01-JAN-19

105 0 01-JAN-19

SQL> ROLLBACK;

Rollback complete.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 01-JAN-19

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> UPDATE Cust1

2 SET date\_opened = '21-OCT-20'

3 WHERE cnum = 101;

1 row updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> ALTER TABLE Cust1

2 MODIFY bal NUMBER(8,2);

Table altered.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 1500 01-JAN-19

105 2000 01-JAN-19

SQL> UPDATE Cust1

2 SET bal = 888.88

3 WHERE cnum = 104;

1 row updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 21-OCT-20

102 500 01-JAN-19

104 888.88 01-JAN-19

105 2000 01-JAN-19

SQL> ALTER TABLE Cust1

2 MODIFY bal NUMBER(3,2);

MODIFY bal NUMBER(3,2)

\*

ERROR at line 2:

ORA-01440: column to be modified must be empty to decrease precision or scale

SQL> UPDATE Cust1

2 SET date\_opened = sysdate;

4 rows updated.

SQL> SELECT \* FROM Cust1;

CNUM BAL DATE\_OPENED

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

101 200 05-FEB-18

102 500 05-FEB-18

104 888.88 05-FEB-18

105 2000 05-FEB-18

2-7

SQL> SELECT sname, major, class

2 FROM Student

3 WHERE class = 3

4 AND major = 'ART';

no rows selected

SQL> c /AND/OR;

4\* OR major = 'ART'

SQL> /

SNAME MAJOR

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

CLASS

----------

Susan ENGL

3

Monica MATH

3

Phoebe ENGL

3

SNAME MAJOR

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

CLASS

----------

Rachel ENGL

3

Cramer ENGL

3

Losmith CHEM

3

SNAME MAJOR

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

CLASS

----------

Gus ART

3

7 rows selected.

SQL> EDIT

Wrote file afiedt.buf

1 SELECT sname, major, class

2 FROM Student

3 WHERE class

4\* BETWEEN 2 AND 4

SQL> /

SNAME MAJOR

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

CLASS

----------

Mary COSC

4

Brenda COSC

2

Kelly MATH

4

SNAME MAJOR

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

CLASS

----------

Reva MATH

2

Harley POLY

2

Donald ACCT

4

SNAME MAJOR

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

CLASS

----------

Chris ACCT

4

Susan ENGL

3

Monica MATH

3

SNAME MAJOR

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

CLASS

----------

Phoebe ENGL

3

Holly POLY

4

Sadie MATH

2

SNAME MAJOR

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

CLASS

----------

Jessica POLY

2

Cedric ENGL

2

Alan COSC

2

SNAME MAJOR

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

CLASS

----------

Rachel ENGL

3

Jerry COSC

4

Cramer ENGL

3

SNAME MAJOR

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

CLASS

----------

Harrison ACCT

4

Francis ACCT

4

Smithly ENGL

2

SNAME MAJOR

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

CLASS

----------

Sebastian ACCT

2

Jake COSC

4

Losmith CHEM

3

SNAME MAJOR

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

CLASS

----------

Benny CHEM

4

Gus ART

3

Jake MATH

2

27 rows selected.