```
SQL> set echo on:
SP2-0158: unknown SET option ":"
SQL>
SQL> @z:/air_main.sql
SP2-0310: unable to open file "z:/air_main.sql"
SQL>
SQL> REM: ********************************************************** Ex4-
VIEWS **********************************************************
SQL>
SQL> REM: To create a view based on table(s) or view(s) and observe its
behavior while performing update
SQL> REM: operations on it.
SQL> REM: Use the schema from Assignment - 3 for the following:
SQL>
SQL> SELECT * FROM fl_schedule WHERE flno='HA-1';

FLNO    DEPARTS         DTIME ARRIVES        ATIME      PRICE
------- --------- ---------- --------- ---------- ----------
HA-1    15-APR-05       1110 15-APR-05       1445    375.23

SQL> SELECT * FROM flights WHERE flightno='HA-1';

FLIGHTN RID         AID
------- ------ ----------
HA-1    LH106        13

SQL>
SQL> REM: 1. Create a view Schedule_15 that display the flight number, route,
airport(origin, destination)
SQL> REM:    departure (date, time), arrival (date, time) of a flight on 15
apr 2005. Label the view
SQL> REM:    column as flight, route, from_airport, to_airport, ddate, dtime,
adate, atime respectively.
SQL>
SQL> CREATE OR REPLACE VIEW Schedule_15 (flight, route, from_airport,
to_airport, ddate, dtime, adate, atime) AS
  2  SELECT fl.flno,
  3  r.routeid,
  4  r.orig_airport,
  5  r.dest_airport,
  6  fl.departs,
  7  fl.dtime,
  8  fl.arrives,
  9  fl.atime
 10  FROM flights f, fl_schedule fl, routes r
 11  WHERE fl.flno=f.flightno AND f.rid=r.routeid
 12  AND fl.departs=TO_DATE('15-04-2005', 'dd-mm-yyyy');

View created.

SQL>
SQL> SELECT * FROM Schedule_15;

FLIGHT  ROUTE  FROM_AIRPORT          TO_AIRPORT           DDATE         DTIME
ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05      1230
15-APR-05       1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05      1230
16-APR-05       2055
HA-1    LH106  Los Angeles          Honolulu             15-APR-05      1110
15-APR-05       1445
A5-3246 CN151  Chicago              New York             15-APR-05      1810
```

```
15-APR-05       1900
9E-3851 MD200  Madison                  Detroit               15-APR-05       1035
15-APR-05       1140
MQ-4477 DN250  Detroit                  New York              15-APR-05       1510
15-APR-05       1600
RP-5018 MC201  Madison                  Chicago               15-APR-05       2100
15-APR-05       2155
BA-178  NYL400 New York                 London                15-APR-05       1140
16-APR-05       1020

8 rows selected.

SQL>
SQL> REM: INSERT OPERATION ON VIEW Schedule_15
SQL> INSERT INTO Schedule_15 VALUES('NIV-104', 'CH20', 'Tokyo', '27-SEP-2022',
'Seoul', 2100, '27-SEP-2022', 2144);
INSERT INTO Schedule_15 VALUES('NIV-104', 'CH20', 'Tokyo', '27-SEP-2022',
'Seoul', 2100, '27-SEP-2022', 2144)
*
ERROR at line 1:
ORA-01776: cannot modify more than one base table through a join view


SQL>
SQL> REM: UPDATE OPERATION ON VIEW Schedule 15
SQL> UPDATE Schedule_15 SET from_airport='Tokyo' WHERE flight='HA-1';
UPDATE Schedule_15 SET from_airport='Tokyo' WHERE flight='HA-1'
                          *
ERROR at line 1:
ORA-01779: cannot modify a column which maps to a non key-preserved table


SQL>
SQL> REM: DELETE OPERATION ON VIEW Schedule_15
SQL> DELETE FROM Schedule_15 WHERE flight='HA-1';

1 row deleted.

SQL>
SQL> SELECT * FROM Schedule_15;

FLIGHT  ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE         DTIME
ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05       1230
15-APR-05       1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05       1230
16-APR-05       2055
A5-3246 CN151  Chicago              New York             15-APR-05       1810
15-APR-05       1900
9E-3851 MD200  Madison              Detroit              15-APR-05       1035
15-APR-05       1140
MQ-4477 DN250  Detroit              New York             15-APR-05       1510
15-APR-05       1600
RP-5018 MC201  Madison              Chicago              15-APR-05       2100
15-APR-05       2155
BA-178  NYL400 New York             London               15-APR-05       1140
16-APR-05       1020

7 rows selected.

SQL>
SQL> SELECT * FROM fl_schedule WHERE flno='HA-1';
```

                                    2

```
no rows selected

SQL> SELECT * FROM flights WHERE flightno='HA-1';

FLIGHTN RID           AID
------- ------ ----------
HA-1    LH106         13

SQL>
SQL> REM: 2. Define a view Airtype that display the number of aircrafts for
each of its type. Label the
SQL> REM:    column as craft_type, total.
SQL>
SQL> CREATE OR REPLACE VIEW Airtype AS
  2  SELECT type craft_type, COUNT(*) AS total
  3  FROM aircraft
  4  GROUP BY type;

View created.

SQL>
SQL> SELECT * FROM Airtype;

CRAFT TYPE       TOTAL
---------- ----------
Boeing           6
Saab             1
Airbus           3
BAe              1
Schweizer        1
Piper            1
Lockheed         1
Tupolev          1
Embraer          1

9 rows selected.

SQL>
SQL> REM: INSERT OPERATION ON VIEW Airtype
SQL> INSERT INTO Airtype VALUES('NiveStar', 100);
INSERT INTO Airtype VALUES('NiveStar', 100)
*
ERROR at line 1:
ORA-01733: virtual column not allowed here


SQL>
SQL> REM: UPDATE OPERATION ON VIEW Airtype
SQL> UPDATE Airtype SET craft type='NiveStar' WHERE total=1;
UPDATE Airtype SET craft_type='NiveStar' WHERE total=1
      *
ERROR at line 1:
ORA-01732: data manipulation operation not legal on this view


SQL>
SQL> REM: DELETE OPERATION ON VIEW Airtype
SQL> DELETE FROM Airtype WHERE total=1;
DELETE FROM Airtype WHERE total=1
          *
ERROR at line 1:
ORA-01732: data manipulation operation not legal on this view
```

```
SQL> DELETE FROM Airtype WHERE craft_type='Boeing';
DELETE FROM Airtype WHERE craft_type='Boeing'
            *
ERROR at line 1:
ORA-01732: data manipulation operation not legal on this view


SQL>
SQL> REM: 3. Create a view Losangeles_Route that contains Los Angeles in the
route. Ensure that the view
SQL> REM:     always contain/allows only information about the Los Angeles
route.
SQL>
SQL> CREATE OR REPLACE VIEW Losangeles_Route AS
  2  SELECT * FROM routes
  3  WHERE orig_airport='Los Angeles' OR dest_airport='Los Angeles' WITH CHECK
  OPTION;

View created.

SQL>
SQL> SELECT * FROM Losangeles_Route;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT           DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.            2308
LC101  Los Angeles          Chicago                    1749
LD102  Los Angeles          Dallas                     1251
LB103  Los Angeles          Boston                     2606
LS104  Los Angeles          Sydney                     7487
LT105  Los Angeles          Tokyo                      5478
LH106  Los Angeles          Honolulu                   2551
CL150  Chicago              Los Angeles                1749
LNY107 Los Angeles          New York                   2510

9 rows selected.

SQL>
SQL> REM: INSERT OPERATION ON VIEW Losangeles_Route
SQL> INSERT INTO Losangeles_Route VALUES('NIV-27', 'Tokyo', 'Seoul', 27900);
INSERT INTO Losangeles_Route VALUES('NIV-27', 'Tokyo', 'Seoul', 27900)
            *
ERROR at line 1:
ORA-01402: view WITH CHECK OPTION where-clause violation


SQL> INSERT INTO Losangeles_Route VALUES('NIV-27', 'Los Angeles', 'Seoul',
27900);

1 row created.

SQL>
SQL> SELECT * FROM Losangeles_Route;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT           DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.            2308
LC101  Los Angeles          Chicago                    1749
LD102  Los Angeles          Dallas                     1251
LB103  Los Angeles          Boston                     2606
LS104  Los Angeles          Sydney                     7487
LT105  Los Angeles          Tokyo                      5478
LH106  Los Angeles          Honolulu                   2551
```

```
CL150  Chicago              Los Angeles                1749
LNY107 Los Angeles          New York                   2510
NIV-27 Los Angeles          Seoul                     27900

10 rows selected.

SQL> SELECT * FROM routes;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.            2308
LC101  Los Angeles          Chicago                    1749
LD102  Los Angeles          Dallas                     1251
LB103  Los Angeles          Boston                     2606
LS104  Los Angeles          Sydney                     7487
LT105  Los Angeles          Tokyo                      5478
LH106  Los Angeles          Honolulu                   2551
CL150  Chicago              Los Angeles                1749
CN151  Chicago              New York                    802
MD200  Madison              Detroit                     319
DN250  Detroit              New York                    470

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
DM251  Detroit              Montreal                    517
MN204  Madison              New York                    789
MC201  Madison              Chicago                     150
MP202  Madison              Pittsburgh                  510
MM203  Madison              Minneapolis                 247
MNY300 Minneapolis          New York                    991
PN350  Pittsburgh           New York                    303
PC351  Pittsburgh           Chicago                     409
NYL400 New York             London                     3471
NYP401 New York             Paris                      3631
LNY107 Los Angeles          New York                   2510

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
NIV-27 Los Angeles          Seoul                     27900

23 rows selected.

SQL>
SQL> REM: UPDATE OPERATION ON VIEW Losangeles_Route
SQL> SELECT * FROM Losangeles_Route;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.            2308
LC101  Los Angeles          Chicago                    1749
LD102  Los Angeles          Dallas                     1251
LB103  Los Angeles          Boston                     2606
LS104  Los Angeles          Sydney                     7487
LT105  Los Angeles          Tokyo                      5478
LH106  Los Angeles          Honolulu                   2551
CL150  Chicago              Los Angeles                1749
LNY107 Los Angeles          New York                   2510
NIV-27 Los Angeles          Seoul                     27900

10 rows selected.

SQL> SELECT * FROM routes;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
```

```
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.             2308
LC101  Los Angeles          Chicago                     1749
LD102  Los Angeles          Dallas                      1251
LB103  Los Angeles          Boston                      2606
LS104  Los Angeles          Sydney                      7487
LT105  Los Angeles          Tokyo                       5478
LH106  Los Angeles          Honolulu                    2551
CL150  Chicago              Los Angeles                 1749
CN151  Chicago              New York                     802
MD200  Madison              Detroit                      319
DN250  Detroit              New York                     470

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
DM251  Detroit              Montreal                     517
MN204  Madison              New York                     789
MC201  Madison              Chicago                      150
MP202  Madison              Pittsburgh                   510
MM203  Madison              Minneapolis                  247
MNY300 Minneapolis          New York                     991
PN350  Pittsburgh           New York                     303
PC351  Pittsburgh           Chicago                      409
NYL400 New York             London                      3471
NYP401 New York             Paris                       3631
LNY107 Los Angeles          New York                    2510

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
NIV-27 Los Angeles          Seoul                      27900

23 rows selected.

SQL>
SQL> UPDATE Losangeles_Route SET routeid='NIV-99' WHERE routeid='NIV-27';

1 row updated.

SQL>
SQL> SELECT * FROM Losangeles_Route;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.             2308
LC101  Los Angeles          Chicago                     1749
LD102  Los Angeles          Dallas                      1251
LB103  Los Angeles          Boston                      2606
LS104  Los Angeles          Sydney                      7487
LT105  Los Angeles          Tokyo                       5478
LH106  Los Angeles          Honolulu                    2551
CL150  Chicago              Los Angeles                 1749
LNY107 Los Angeles          New York                    2510
NIV-99 Los Angeles          Seoul                      27900

10 rows selected.

SQL> SELECT * FROM routes;

ROUTEI ORIG_AIRPORT         DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.             2308
LC101  Los Angeles          Chicago                     1749
LD102  Los Angeles          Dallas                      1251
LB103  Los Angeles          Boston                      2606
```

```
LS104  Los Angeles          Sydney                7487
LT105  Los Angeles          Tokyo                 5478
LH106  Los Angeles          Honolulu              2551
CL150  Chicago              Los Angeles           1749
CN151  Chicago              New York               802
MD200  Madison              Detroit                319
DN250  Detroit              New York               470


ROUTEI ORIG_AIRPORT          DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
DM251  Detroit              Montreal               517
MN204  Madison              New York               789
MC201  Madison              Chicago                150
MP202  Madison              Pittsburgh             510
MM203  Madison              Minneapolis            247
MNY300 Minneapolis          New York               991
PN350  Pittsburgh           New York               303
PC351  Pittsburgh           Chicago                409
NYL400 New York             London                3471
NYP401 New York             Paris                 3631
LNY107 Los Angeles          New York              2510


ROUTEI ORIG_AIRPORT          DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
NIV-99 Los Angeles          Seoul                27900

23 rows selected.

SQL>
SQL> REM: DELETE OPERATION ON VIEW Losangeles_Route
SQL> SELECT * FROM Losangeles_Route;

ROUTEI ORIG_AIRPORT          DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.       2308
LC101  Los Angeles          Chicago               1749
LD102  Los Angeles          Dallas                1251
LB103  Los Angeles          Boston                2606
LS104  Los Angeles          Sydney                7487
LT105  Los Angeles          Tokyo                 5478
LH106  Los Angeles          Honolulu              2551
CL150  Chicago              Los Angeles           1749
LNY107 Los Angeles          New York              2510
NIV-99 Los Angeles          Seoul                27900

10 rows selected.

SQL> SELECT * FROM routes;

ROUTEI ORIG_AIRPORT          DEST_AIRPORT          DISTANCE
------ -------------------- -------------------- ----------
LW100  Los Angeles          Washington D.C.       2308
LC101  Los Angeles          Chicago               1749
LD102  Los Angeles          Dallas                1251
LB103  Los Angeles          Boston                2606
LS104  Los Angeles          Sydney                7487
LT105  Los Angeles          Tokyo                 5478
LH106  Los Angeles          Honolulu              2551
CL150  Chicago              Los Angeles           1749
CN151  Chicago              New York               802
MD200  Madison              Detroit                319
DN250  Detroit              New York               470


ROUTEI ORIG_AIRPORT          DEST_AIRPORT          DISTANCE
```

7

```
       ------ -------------------- -------------------- ----------
       DM251  Detroit              Montreal                    517
       MN204  Madison              New York                    789
       MC201  Madison              Chicago                     150
       MP202  Madison              Pittsburgh                  510
       MM203  Madison              Minneapolis                 247
       MNY300 Minneapolis          New York                    991
       PN350  Pittsburgh           New York                    303
       PC351  Pittsburgh           Chicago                     409
       NYL400 New York             London                     3471
       NYP401 New York             Paris                      3631
       LNY107 Los Angeles          New York                   2510

       ROUTEI ORIG_AIRPORT        DEST_AIRPORT          DISTANCE
       ------ -------------------- -------------------- ----------
       NIV-99 Los Angeles          Seoul                     27900

       23 rows selected.

       SQL>
       SQL> DELETE FROM Losangeles_Route WHERE routeid='NIV-99';

       1 row deleted.

       SQL>
       SQL> SELECT * FROM Losangeles_Route;

       ROUTEI ORIG_AIRPORT        DEST_AIRPORT          DISTANCE
       ------ -------------------- -------------------- ----------
       LW100  Los Angeles          Washington D.C.            2308
       LC101  Los Angeles          Chicago                    1749
       LD102  Los Angeles          Dallas                     1251
       LB103  Los Angeles          Boston                     2606
       LS104  Los Angeles          Sydney                     7487
       LT105  Los Angeles          Tokyo                      5478
       LH106  Los Angeles          Honolulu                   2551
       CL150  Chicago              Los Angeles                1749
       LNY107 Los Angeles          New York                   2510

       9 rows selected.

       SQL> SELECT * FROM routes;

       ROUTEI ORIG AIRPORT        DEST AIRPORT          DISTANCE
       ------ -------------------- -------------------- ----------
       LW100  Los Angeles          Washington D.C.            2308
       LC101  Los Angeles          Chicago                    1749
       LD102  Los Angeles          Dallas                     1251
       LB103  Los Angeles          Boston                     2606
       LS104  Los Angeles          Sydney                     7487
       LT105  Los Angeles          Tokyo                      5478
       LH106  Los Angeles          Honolulu                   2551
       CL150  Chicago              Los Angeles                1749
       CN151  Chicago              New York                    802
       MD200  Madison              Detroit                     319
       DN250  Detroit              New York                    470

       ROUTEI ORIG_AIRPORT        DEST_AIRPORT          DISTANCE
       ------ -------------------- -------------------- ----------
       DM251  Detroit              Montreal                    517
       MN204  Madison              New York                    789
       MC201  Madison              Chicago                     150
       MP202  Madison              Pittsburgh                  510
       MM203  Madison              Minneapolis                 247
```

8

```
MNY300 Minneapolis        New York                       991
PN350  Pittsburgh         New York                       303
PC351  Pittsburgh         Chicago                        409
NYL400 New York           London                         3471
NYP401 New York           Paris                          3631
LNY107 Los Angeles        New York                       2510
```

22 rows selected.

```
SQL>
SQL> REM: 4. Create a view named Losangeles_Flight on Schedule_15 (as defined
in 1) that display flight,
SQL> REM:    departure (date, time), arrival (date, time) of flight(s) from
Los Angeles.
SQL>
SQL> CREATE OR REPLACE VIEW Losangeles_Flight AS
  2  SELECT flight, ddate, dtime, adate, atime AS arrival
  3  FROM Schedule_15
  4  WHERE from_airport='Los Angeles';
```

View created.

```
SQL>
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE            DTIME ADATE            ARRIVAL
------- --------- ---------- --------- ----------
JJ-2482 15-APR-05       1230 15-APR-05       1540
SQ-11   15-APR-05       1230 16-APR-05       2055

SQL> SELECT * FROM Schedule_15;

FLIGHT   ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE         DTIME
ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05       1230
15-APR-05       1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05       1230
16-APR-05       2055
A5-3246 CN151  Chicago              New York             15-APR-05       1810
15-APR-05       1900
9E-3851 MD200  Madison              Detroit              15-APR-05       1035
15-APR-05       1140
MQ-4477 DN250  Detroit              New York             15-APR-05       1510
15-APR-05       1600
RP-5018 MC201  Madison              Chicago              15-APR-05       2100
15-APR-05       2155
BA-178  NYL400 New York             London               15-APR-05       1140
16-APR-05       1020
```

7 rows selected.

```
SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO    DEPARTS          DTIME ARRIVES          ATIME      PRICE
------- --------- ---------- --------- ---------- ----------
SQ-11   15-APR-05       1230 16-APR-05       2055     780.99

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID         AID
------- ------ ----------
SQ-11   LT105          11
```

```
SQL>
SQL> REM: INSERT OPERATION ON VIEW Losangeles_Flight
SQL> INSERT INTO Losangeles_Flight VALUES('SQ-11', '27-SEP-2020', 1850, '28-
SEP-2020', 2100);

1 row created.

SQL>
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE          DTIME ADATE        ARRIVAL
------- --------- ---------- --------- ----------
JJ-2482 15-APR-05       1230 15-APR-05       1540
SQ-11   15-APR-05       1230 16-APR-05       2055

SQL> SELECT * FROM Schedule_15;

FLIGHT  ROUTE  FROM AIRPORT         TO_AIRPORT           DDATE         DTIME
ADATE           ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05      1230
15-APR-05        1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05      1230
16-APR-05        2055
A5-3246 CN151  Chicago              New York             15-APR-05      1810
15-APR-05        1900
9E-3851 MD200  Madison              Detroit              15-APR-05      1035
15-APR-05        1140
MQ-4477 DN250  Detroit              New York             15-APR-05      1510
15-APR-05        1600
RP-5018 MC201  Madison              Chicago              15-APR-05      2100
15-APR-05        2155
BA-178  NYL400 New York             London               15-APR-05      1140
16-APR-05        1020

7 rows selected.

SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO    DEPARTS        DTIME ARRIVES        ATIME      PRICE
------- --------- ---------- --------- ---------- ----------
SQ-11   15-APR-05       1230 16-APR-05       2055     780.99
SQ-11   27-SEP-20       1850 28-SEP-20       2100

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID         AID
------- ------ ----------
SQ-11   LT105          11

SQL>
SQL> REM: UPDATE OPERATION ON VIEW Losangeles_Flight
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE          DTIME ADATE        ARRIVAL
------- --------- ---------- --------- ----------
JJ-2482 15-APR-05       1230 15-APR-05       1540
SQ-11   15-APR-05       1230 16-APR-05       2055

SQL> SELECT * FROM Schedule_15;

FLIGHT  ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE         DTIME
```

```
            ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05       1230
15-APR-05      1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05       1230
16-APR-05      2055
A5-3246 CN151  Chicago              New York             15-APR-05       1810
15-APR-05      1900
9E-3851 MD200  Madison              Detroit              15-APR-05       1035
15-APR-05      1140
MQ-4477 DN250  Detroit              New York             15-APR-05       1510
15-APR-05      1600
RP-5018 MC201  Madison              Chicago              15-APR-05       2100
15-APR-05      2155
BA-178  NYL400 New York             London               15-APR-05       1140
16-APR-05      1020

7 rows selected.

SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO    DEPARTS        DTIME ARRIVES        ATIME      PRICE
------- --------- ---------- --------- ---------- ----------
SQ-11   15-APR-05       1230 16-APR-05       2055     780.99
SQ-11   27-SEP-20       1850 28-SEP-20       2100

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID          AID
------- ------ ----------
SQ-11   LT105          11

SQL>
SQL> UPDATE Losangeles_Flight SET dtime=1300 WHERE flight='SQ-11';

1 row updated.

SQL>
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE          DTIME ADATE          ARRIVAL
------- --------- ---------- --------- ----------
JJ-2482 15-APR-05       1230 15-APR-05       1540
SQ-11   15-APR-05       1300 16-APR-05       2055

SQL> SELECT * FROM Schedule_15;

FLIGHT  ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE         DTIME
ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05       1230
15-APR-05      1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05       1300
16-APR-05      2055
A5-3246 CN151  Chicago              New York             15-APR-05       1810
15-APR-05      1900
9E-3851 MD200  Madison              Detroit              15-APR-05       1035
15-APR-05      1140
MQ-4477 DN250  Detroit              New York             15-APR-05       1510
15-APR-05      1600
RP-5018 MC201  Madison              Chicago              15-APR-05       2100
15-APR-05      2155
```

```
BA-178  NYL400 New York              London              15-APR-05      1140
16-APR-05        1020
```

7 rows selected.

```
SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO     DEPARTS         DTIME ARRIVES        ATIME      PRICE
-------  ---------  ---------- ---------  ----------  ----------
SQ-11    15-APR-05        1300 16-APR-05        2055     780.99
SQ-11    27-SEP-20        1850 28-SEP-20        2100

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID          AID
------- ------  ----------
SQ-11   LT105           11

SQL>
SQL> REM: DELETE OPERATION ON VIEW Losangeles_Flight
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE          DTIME ADATE         ARRIVAL
-------  ---------  ---------- ---------  ----------
JJ-2482 15-APR-05        1230 15-APR-05        1540
SQ-11   15-APR-05        1300 16-APR-05        2055

SQL> SELECT * FROM Schedule_15;

FLIGHT   ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE        DTIME
ADATE          ATIME
-------  ------ -------------------- -------------------- ---------  ----------
---------  ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05      1230
15-APR-05        1540
SQ-11   LT105  Los Angeles          Tokyo                15-APR-05      1300
16-APR-05        2055
A5-3246 CN151  Chicago              New York             15-APR-05      1810
15-APR-05        1900
9E-3851 MD200  Madison              Detroit              15-APR-05      1035
15-APR-05        1140
MQ-4477 DN250  Detroit              New York             15-APR-05      1510
15-APR-05        1600
RP-5018 MC201  Madison              Chicago              15-APR-05      2100
15-APR-05        2155
BA-178  NYL400 New York             London               15-APR-05      1140
16-APR-05        1020
```

7 rows selected.

```
SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO     DEPARTS         DTIME ARRIVES        ATIME      PRICE
-------  ---------  ---------- ---------  ----------  ----------
SQ-11    15-APR-05        1300 16-APR-05        2055     780.99
SQ-11    27-SEP-20        1850 28-SEP-20        2100

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID          AID
------- ------  ----------
SQ-11   LT105           11

SQL>
```

```
SQL> DELETE FROM Losangeles_Flight WHERE flight='SQ-11';

1 row deleted.

SQL>
SQL> SELECT * FROM Losangeles_Flight;

FLIGHT  DDATE          DTIME ADATE        ARRIVAL
------- ---------- ---------- --------- ----------
JJ-2482 15-APR-05        1230 15-APR-05       1540

SQL> SELECT * FROM Schedule_15;

FLIGHT   ROUTE  FROM_AIRPORT         TO_AIRPORT           DDATE          DTIME
ADATE          ATIME
------- ------ -------------------- -------------------- --------- ----------
--------- ----------
JJ-2482 LW100  Los Angeles          Washington D.C.      15-APR-05       1230
15-APR-05       1540
A5-3246 CN151  Chicago              New York             15-APR-05       1810
15-APR-05       1900
9E-3851 MD200  Madison              Detroit              15-APR-05       1035
15-APR-05       1140
MQ-4477 DN250  Detroit              New York             15-APR-05       1510
15-APR-05       1600
RP-5018 MC201  Madison              Chicago              15-APR-05       2100
15-APR-05       2155
BA-178  NYL400 New York             London               15-APR-05       1140
16-APR-05       1020

6 rows selected.

SQL> SELECT * FROM fl_schedule WHERE flno='SQ-11';

FLNO    DEPARTS        DTIME ARRIVES        ATIME      PRICE
------- ---------- ---------- --------- ---------- ----------
SQ-11   27-SEP-20       1850 28-SEP-20       2100

SQL> SELECT * FROM flights WHERE flightno='SQ-11';

FLIGHTN RID         AID
------- ------ ----------
SQ-11   LT105          11

SQL> spool off
```