```
SQL> START "C:\Users\3122225002028\Documents\ex8"
SQL> SET ECHO ON
SQL>
SQL> REM >>> UNORMALIZED FORM OF Dream House Lease Database <<<
SQL> DROP TABLE dreamhouselease;
Table dropped.
SQL> CREATE TABLE dreamhouselease (
    clientNo VARCHAR2(4),
    cName VARCHAR2(50),
4
    propertyNo VARCHAR2(4),
5
     pAddress VARCHAR2(50),
6
    rentStart DATE,
7
    rentFinish DATE,
    rent NUMBER(5),
9
    ownerNo VARCHAR2(4),
10
    oName VARCHAR2(50)
11 );
Table created.
SQL> INSERT INTO dreamhouselease VALUES('CR76', 'John Kay', 'PG4', '6 Lawrence St, Glasgow',
TO_DATE
1 row created.
SQL> INSERT INTO dreamhouselease VALUES('CR76', 'John Kay', 'PG16', '5 Novar Dr, Glasgow',
TO_DATE('
1 row created.
SQL> INSERT INTO dreamhouselease VALUES('CR56', 'Aline Stewart', 'PG4', '6 Lawrence St, Glasgow',
TO
1 row created.
SQL> INSERT INTO dreamhouselease VALUES('CR56', 'Alaine Stewart', 'PG36', '2 Manor Rd, Glasgow',
TO_
```

1 row created. SQL> INSERT INTO dreamhouselease VALUES('CR56', 'Alaine Stewart', 'PG16', '5 Novar Dr, Glasgow', TO_ 1 row created. SQL> SELECT * FROM dreamhouselease; **PROP** CLIE CNAME **PADDRESS RENTSTART RENTFINIS RENT OWNE ONAME** CR76 John Kay PG4 01-JUL-12 31-AUG-13 6 Lawrence St, Glasgow 350 CO40 Tina Murphy CR76 John Kay PG16 5 Novar Dr, Glasgow 01-SEP-13 01-SEP-14 50 CO93 Tony Shaw CLIE CNAME PROP PADDRESS **RENTSTART RENTFINIS RENT OWNE ONAME** CR56 Aline Stewart PG4 01-SEP-11 10-JUN-12 6 Lawrence St, Glasgow

350 CO40 Tina Murphy

CR56 Alaine Stewart PG36

2 Manor Rd, Glasgow 10-OCT-12 01-DEC-13

CLIE CNAME **PROP**

PADDRESS RENTSTART RENTFINIS RENT OWNE ONAME 375 CO93 Tony Shaw **CR56 Alaine Stewart** PG16 01-NOV-14 10-AUG-15 5 Novar Dr, Glasgow 450 CO93 Tony Shaw SQL> REM >>> NORMALIZED FORM OF Dream House Lease Database <<< SQL> DROP TABLE client; Table dropped. SQL> DROP TABLE rent; Table dropped. SQL> DROP TABLE property; Table dropped. SQL> DROP TABLE owner; Table dropped. SQL> SQL> CREATE TABLE client(2 clientNo VARCHAR2(4), cName VARCHAR2(50)); Table created. SQL> SQL> CREATE TABLE rent(2 propertyNo VARCHAR2(4), 3 clientNo VARCHAR2(4), 4 rentStart DATE, 5 rentFinish DATE,

6

rent NUMBER(5));

```
Table created.
SQL>
SQL> CREATE TABLE property(
       propertyNo VARCHAR2(4),
 3
       pAddress VARCHAR2(50),
       ownerNo VARCHAR2(4));
Table created.
SQL>
SQL> CREATE TABLE owner(
       ownerNo VARCHAR2(4),
       oName VARCHAR2(50));
Table created.
SQL>
SQL> INSERT INTO client VALUES('CR76', 'John Kay');
1 row created.
SQL> INSERT INTO client VALUES('CR56', 'Alaine Stewart');
1 row created.
SQL>
SQL> INSERT INTO rent VALUES('PG4', 'CR76', TO_DATE('01-JUL-12','DD-MON-YY'), TO_DATE('31-AUG-
13','D
1 row created.
SQL> INSERT INTO rent VALUES('PG16', 'CR76', TO_DATE('01-SEP-13','DD-MON-YY'), TO_DATE('01-
SEP-14','
1 row created.
SQL> INSERT INTO rent VALUES('PG4', 'CR56', TO_DATE('01-SEP-11','DD-MON-YY'), TO_DATE('10-JUN-
12','D
1 row created.
SQL> INSERT INTO rent VALUES('PG36', 'CR56', TO_DATE('10-OCT-12','DD-MON-YY'), TO_DATE('01-
```

DEC-13','

```
SQL> INSERT INTO rent VALUES('PG16', 'CR56', TO_DATE('01-NOV-14','DD-MON-YY'), TO_DATE('10-
AUG-15','
1 row created.
SQL> INSERT INTO property VALUES('PG4', '6 Lawrence St, Glasgow', 'CO40');
1 row created.
SQL> INSERT INTO property VALUES('PG16', '5 Novar Dr, Glasgow', 'CO93');
1 row created.
SQL> INSERT INTO property VALUES('PG36', '2 Manor Rd, Glasgow', 'CO93');
1 row created.
SQL> INSERT INTO owner VALUES('CO40', 'Tina Murphy');
1 row created.
SQL> INSERT INTO owner VALUES('CO93', 'Tony Shaw');
1 row created.
SQL> SELECT * FROM client;
CLIE CNAME
CR76 John Kay
CR56 Alaine Stewart
SQL> SELECT * FROM rent;
PROP CLIE RENTSTART RENTFINIS
                                  RENT
PG4 CR76 01-JUL-12 31-AUG-13
                                  350
PG16 CR76 01-SEP-13 01-SEP-14
                                  50
PG4 CR56 01-SEP-11 10-JUN-12
                                 350
PG36 CR56 10-OCT-12 01-DEC-13
                                  375
PG16 CR56 01-NOV-14 10-AUG-15
                                   450
SQL> SELECT * FROM property;
PROP PADDRESS
                                     OWNE
```

1 row created.

PG4 6 Lawrence St, Glasgow CO40

PG16 5 Novar Dr, Glasgow CO93

PG36 2 Manor Rd, Glasgow CO93

SQL> SELECT * FROM owner;

OWNE ONAME

CO40 Tina Murphy

CO93 Tony Shaw

SQL> REM EXERCISE 8

```
SQL> START "C:\Users\3122225002041\Documents\ex8"
SQL> SET ECHO ON
SQL>
SQL> REM >>> UNORMALIZED FORM OF Dream House Lease Database <<<
SQL> DROP TABLE dreamhouselease;
Table dropped.
SQL> CREATE TABLE dreamhouselease (
    clientNo VARCHAR2(4),
    cName VARCHAR2(50),
 4
    propertyNo VARCHAR2(4),
     pAddress VARCHAR2(50),
    rentStart DATE,
 7
     rentFinish DATE,
    rent NUMBER(5),
9
     ownerNo VARCHAR2(4),
10
    oName VARCHAR2(50)
11 );
Table created.
SQL> INSERT INTO dreamhouselease VALUES('CR76', 'John Kay', 'PG4', '6 Lawrence St, Glasgow',
TO_DATE
1 row created.
SQL> INSERT INTO dreamhouselease VALUES('CR76', 'John Kay', 'PG16', '5 Novar Dr, Glasgow',
TO_DATE('
1 row created.
SQL> INSERT INTO dreamhouselease VALUES('CR56', 'Aline Stewart', 'PG4', '6 Lawrence St, Glasgow',
TO
1 row created.
```

SQL> INSERT INTO dreamhouse TO_	elease VALUES('CR56', 'Alaine Stewart', 'PG36', '2 Manor Rd, Glasgow'		
1 row created.			
SQL> INSERT INTO dreamhouse TO_	elease VALUES('CR56', 'Alaine Stewart', 'PG16', '5 Novar Dr, Glasgow',		
1 row created.			
SQL> SELECT * FROM dreamhouselease;			
CLIE CNAME	PROP		
PADDRESS	RENTSTART RENTFINIS		
RENT OWNE ONAME			
CR76 John Kay	PG4		
6 Lawrence St, Glasgow	01-JUL-12 31-AUG-13		
350 CO40 Tina Murphy			
CR76 John Kay	PG16		
5 Novar Dr, Glasgow	01-SEP-13 01-SEP-14		
50 CO93 Tony Shaw			
CLIE CNAME	PROP		
PADDRESS	RENTSTART RENTFINIS		
RENT OWNE ONAME			
CR56 Aline Stewart	PG4		
Lawrence St, Glasgow 01-SEP-11 10-JUN-12			
350 CO40 Tina Murphy			
CR56 Alaine Stewart	PG36		

10-OCT-12 01-DEC-13

2 Manor Rd, Glasgow

CLIE CN	IAME 	PROP
PADDR	ESS	RENTSTART RENTFINIS
REN	IT OWNE ONAME	
	CO93 Tony Shaw	
CR56 A	laine Stewart	PG16
5 Nova	r Dr, Glasgow	01-NOV-14 10-AUG-15
450	CO93 Tony Shaw	
SQL> REM >>> NORMALIZED FORM OF Dream House Lease Database <<<		
SQL> D	ROP TABLE client;	
Table d	ropped.	
SQL> D	ROP TABLE rent;	
Table dropped.		
SQL> DROP TABLE property;		
Table dropped.		
SQL> DROP TABLE owner;		
Table dropped.		
SQL>		
SQL> C	REATE TABLE client(
2	clientNo VARCHAR2(4),	
3	cName VARCHAR2(50));	
Table c	reated.	
SQL>		
SQL> C	REATE TABLE rent(
2	propertyNo VARCHAR2(4),
3	clientNo VARCHAR2(4),	
4	rentStart DATE,	

5

rentFinish DATE,

```
6
       rent NUMBER(5));
Table created.
SQL>
SQL> CREATE TABLE property(
       propertyNo VARCHAR2(4),
 3
       pAddress VARCHAR2(50),
       ownerNo VARCHAR2(4));
Table created.
SQL>
SQL> CREATE TABLE owner(
       ownerNo VARCHAR2(4),
       oName VARCHAR2(50));
Table created.
SQL> INSERT INTO client VALUES('CR76', 'John Kay');
1 row created.
SQL> INSERT INTO client VALUES('CR56', 'Alaine Stewart');
1 row created.
SQL>
SQL> INSERT INTO rent VALUES('PG4', 'CR76', TO_DATE('01-JUL-12','DD-MON-YY'), TO_DATE('31-AUG-
13','D
1 row created.
SQL> INSERT INTO rent VALUES('PG16', 'CR76', TO_DATE('01-SEP-13','DD-MON-YY'), TO_DATE('01-
SEP-14','
1 row created.
SQL> INSERT INTO rent VALUES('PG4', 'CR56', TO_DATE('01-SEP-11','DD-MON-YY'), TO_DATE('10-JUN-
12','D
1 row created.
SQL> INSERT INTO rent VALUES('PG36', 'CR56', TO_DATE('10-OCT-12','DD-MON-YY'), TO_DATE('01-
```

DEC-13','

```
SQL> INSERT INTO rent VALUES('PG16', 'CR56', TO_DATE('01-NOV-14','DD-MON-YY'), TO_DATE('10-
AUG-15','
1 row created.
SQL> INSERT INTO property VALUES('PG4', '6 Lawrence St, Glasgow', 'CO40');
1 row created.
SQL> INSERT INTO property VALUES('PG16', '5 Novar Dr, Glasgow', 'CO93');
1 row created.
SQL> INSERT INTO property VALUES('PG36', '2 Manor Rd, Glasgow', 'CO93');
1 row created.
SQL> INSERT INTO owner VALUES('CO40', 'Tina Murphy');
1 row created.
SQL> INSERT INTO owner VALUES('CO93', 'Tony Shaw');
1 row created.
SQL> SELECT * FROM client;
CLIE CNAME
CR76 John Kay
CR56 Alaine Stewart
SQL> SELECT * FROM rent;
PROP CLIE RENTSTART RENTFINIS
                                  RENT
PG4 CR76 01-JUL-12 31-AUG-13
                                  350
PG16 CR76 01-SEP-13 01-SEP-14
                                  50
PG4 CR56 01-SEP-11 10-JUN-12
                                 350
PG36 CR56 10-OCT-12 01-DEC-13
                                  375
PG16 CR56 01-NOV-14 10-AUG-15
                                   450
SQL> SELECT * FROM property;
PROP PADDRESS
                                     OWNE
```

1 row created.

PG4 6 Lawrence St, Glasgow CO40

PG16 5 Novar Dr, Glasgow CO93

PG36 2 Manor Rd, Glasgow CO93

SQL> SELECT * FROM owner;

OWNE ONAME

CO40 Tina Murphy

CO93 Tony Shaw