SQL\*Plus: Release 11.2.0.2.0 Production on Wed Jul 31 09:34:12 2019

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SQL> conn system

Enter password:

Connected.

SQL> ed

SQL> create table ACCOUNT(

2 Account\_id number(10,0) primary key,

3 Avail\_balance float,

4 Close\_date date,

5 Last\_activity\_date date,

6 Open\_date date not null,

7 Pending\_balance float,

8 Status varchar2(10),

9 Cust\_id number(10,0),

10 Open\_branch\_id number(10,0),

11 Open\_emp\_id number(10,0));

Table created.

SQL> create table Acc\_transaction(

2 Txn\_id number(19,0) primary key,

3 Amount float not null,

4

SQL> ed

Wrote file afiedt.buf

1 create table Branch(

2 Branch\_id number(10,0) primary key,

3 Address varchar2(30),

4 City varchar2(20),

5 Name varchar2(20) not null,

6 State varchar2(10),

7\* Zip\_code varchar2(12))

SQL> ;

1 create table Branch(

2 Branch\_id number(10,0) primary key,

3 Address varchar2(30),

4 City varchar2(20),

5 Name varchar2(20) not null,

6 State varchar2(10),

7\* Zip\_code varchar2(12))

SQL> ;

1 create table Branch(

2 Branch\_id number(10,0) primary key,

3 Address varchar2(30),

4 City varchar2(20),

5 Name varchar2(20) not null,

6 State varchar2(10),

7\* Zip\_code varchar2(12))

SQL> /

Table created.

SQL> ed

Wrote file afiedt.buf

1 create table Customer(

2 Cust\_id number(10,0) primary key,

3 Address varchar2(30),

4 City varchar2(20) not null,

5 Cust\_type\_id varchar2(1) not null,

6 Fed\_id varchar2(12) not null,

7 Postal\_code varchar2(10),

8\* State varchar2(20))

SQL> /

Table created.

SQL> ed

Wrote file afiedt.buf

1 create table Department(

2 Dept\_id number(10,0) primary key,

3\* Name varchar2(20) not null)

SQL> /

Table created.

SQL> ed

Wrote file afiedt.buf

1 create table Employee(

2 Emp\_id number(10,0) primary key,

3 End\_date date,

4 First\_name varchar2(20) not null,

5 Last\_name varchar2(20) not null,

6 Start\_date date not null,

7 Title varchar2(20),

8 Assigned\_branch\_id number(10,0) references Branch(Branch\_id),

9 Dept\_id number(10,0) references Department(Dept\_id),

10\* Superior\_emp\_id number(10,0) references Employee(Emp\_id))

SQL> /

Table created.

SQL> ed

Wrote file afiedt.buf

1 create table Acc\_transaction(

2 Txn\_id number(19,0) primary key,

3 Amount float not null,

4 Funds\_avail\_date date not null,

5 Txn\_date date not null,

6 Txn\_type\_cd varchar2(10),

7 Account\_id number(10,0) references Account(Account\_id),

8 Execution\_branch\_id number(10,0) references Branch(Branch\_id),

9\* Teller\_emp\_id number(10,0) references Employee(Emp\_id))

SQL> /

Table created.

SQL> alter table ACCOUNT add(foreign key(Cust\_id) references Customer(Cust\_id));

Table altered.

SQL> desc ACCOUNT

Name Null? Type

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

ACCOUNT\_ID NOT NULL NUMBER(10)

AVAIL\_BALANCE FLOAT(126)

CLOSE\_DATE DATE

LAST\_ACTIVITY\_DATE DATE

OPEN\_DATE NOT NULL DATE

PENDING\_BALANCE FLOAT(126)

STATUS VARCHAR2(10)

CUST\_ID NUMBER(10)

OPEN\_BRANCH\_ID NUMBER(10)

OPEN\_EMP\_ID NUMBER(10)

SQL> desc ACC\_TRANSACTION

Name Null? Type

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

TXN\_ID NOT NULL NUMBER(19)

AMOUNT NOT NULL FLOAT(126)

FUNDS\_AVAIL\_DATE NOT NULL DATE

TXN\_DATE NOT NULL DATE

TXN\_TYPE\_CD VARCHAR2(10)

ACCOUNT\_ID NUMBER(10)

EXECUTION\_BRANCH\_ID NUMBER(10)

TELLER\_EMP\_ID NUMBER(10)

SQL> desc bRANCH

Name Null? Type

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

BRANCH\_ID NOT NULL NUMBER(10)

ADDRESS VARCHAR2(30)

CITY VARCHAR2(20)

NAME NOT NULL VARCHAR2(20)

STATE VARCHAR2(10)

ZIP\_CODE VARCHAR2(12)

SQL> desc Customer

Name Null? Type

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

CUST\_ID NOT NULL NUMBER(10)

ADDRESS VARCHAR2(30)

CITY NOT NULL VARCHAR2(20)

CUST\_TYPE\_ID NOT NULL VARCHAR2(1)

FED\_ID NOT NULL VARCHAR2(12)

POSTAL\_CODE VARCHAR2(10)

STATE VARCHAR2(20)

SQL> desc department

Name Null? Type

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

DEPT\_ID NOT NULL NUMBER(10)

NAME NOT NULL VARCHAR2(20)

SQL> desc employee

Name Null? Type

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

EMP\_ID NOT NULL NUMBER(10)

END\_DATE DATE

FIRST\_NAME NOT NULL VARCHAR2(20)

LAST\_NAME NOT NULL VARCHAR2(20)

START\_DATE NOT NULL DATE

TITLE VARCHAR2(20)

ASSIGNED\_BRANCH\_ID NUMBER(10)

DEPT\_ID NUMBER(10)

SUPERIOR\_EMP\_ID NUMBER(10)

SQL> alter table ACCOUNT add(foreign key(Open\_branch\_id) references Branch(Branch\_id));

Table altered.

SQL> alter table ACCOUNT add(foreign key(Open\_emp\_id) references Employee(Emp\_id));

Table altered.

SQL> select \* from Department;

DEPT\_ID NAME

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

101 jacob

102 anne

105 frank

108 simpson

107 waldo

106 edward

6 rows selected.

SQL> select \* from Branch;

BRANCH\_ID ADDRESS CITY NAME STATE ZIP\_CODE

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

1101 XY lane, US F Toro Io 23667

1104 TR lane, Russia R Boxo Epi 77880

1102 ER lane, SA P Abon Wiom 44567

1105 ER lane, SA T Vtox Romq 44578

1108 EY lane, Ind U Ghok Joml 56889

1107 QI lane, Can J Tibn Cfho 67890

1 EY lane, Ind J Tibn Cfho 47668

2 ER lane, SA U Ghok Romq 34557

8 rows selected.

SQL> select \* from Customer;

CUST\_ID ADDRESS CITY C FED\_ID POSTAL\_COD STATE

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

3001 ABC, Rome T W Tuui 56680 Ryu

3002 Rto, zone E O X 56789 Erue

3003 Rommn Rty G ty 49901 Romn

3004 Wllk Tuio L tuy 50084 Dool

SQL> select \* from Acc\_transaction;

TXN\_ID AMOUNT FUNDS\_AVA TXN\_DATE TXN\_TYPE\_C ACCOUNT\_ID EXECUTION\_BRANCH\_ID TELLER\_EMP\_ID

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

678008 67900 20-JAN-19 30-JUL-17 ti889 202 2 4003

347800 68347 04-JAN-98 20-JUL-19 nh990 203 1 4002

459912 589380 03-JUL-19 20-JAN-19 ug667 204 2 4004

568811 678456920 20-JAN-19 30-JUL-17 bv654 201 1 4003

SQL> select \* from ACCOUNT;

ACCOUNT\_ID AVAIL\_BALANCE CLOSE\_DAT LAST\_ACTI OPEN\_DATE PENDING\_BALANCE STATUS CUST\_ID OPEN\_BRANCH\_ID OPEN\_EMP\_ID

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

201 76999 09-DEC-20 08-AUG-18 05-MAR-00 0 inactive 3002 2 4002

202 567000 30-MAR-19 04-JAN-19 17-JUL-10 5679 active 3001 1 4003

203 674930 05-AUG-20 06-MAR-19 04-JAN-98 988 active 3004 2 4002

204 683 20-JUL-19 03-JUL-19 05-AUG-15 0 active 3003 2 4001

SQL> select \* from Employee;

EMP\_ID END\_DATE FIRST\_NAME LAST\_NAME START\_DAT TITLE ASSIGNED\_BRANCH\_ID DEPT\_ID SUPERIOR\_EMP\_ID

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

4003 03-JAN-17 Ali S 11-JAN-01 Prof 1101 101 4003

4001 03-FEB-19 Chan R 04-MAR-97 Mr 1108 102 4003

4002 03-JUL-19 Som H 02-APR-00 XX 2 102 4001

4004 17-AUG-20 Sriyam T 22-JUN-00 RR 1 107 4003

**QUERIES**:

Q.1)

1.

SQL> select e.First\_name, e.Last\_name, e.Superior\_emp\_id, b.Name, d.Name from Employee e, Branch b, Department d

2 where e.Dept\_id = d.Dept\_id;

FIRST\_NAME LAST\_NAME SUPERIOR\_EMP\_ID NAME NAME

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

Ali S 4003 Toro jacob

Ali S 4003 Boxo jacob

Ali S 4003 Abon jacob

Ali S 4003 Vtox jacob

Ali S 4003 Ghok jacob

Ali S 4003 Tibn jacob

Ali S 4003 Tibn jacob

Ali S 4003 Ghok jacob

Som H 4001 Toro anne

Som H 4001 Boxo anne

Som H 4001 Abon anne

FIRST\_NAME LAST\_NAME SUPERIOR\_EMP\_ID NAME NAME

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

Som H 4001 Vtox anne

Som H 4001 Ghok anne

Som H 4001 Tibn anne

Som H 4001 Tibn anne

Som H 4001 Ghok anne

Chan R 4003 Toro anne

Chan R 4003 Boxo anne

Chan R 4003 Abon anne

Chan R 4003 Vtox anne

Chan R 4003 Ghok anne

Chan R 4003 Tibn anne

FIRST\_NAME LAST\_NAME SUPERIOR\_EMP\_ID NAME NAME

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

Chan R 4003 Tibn anne

Chan R 4003 Ghok anne

Sriyam T 4003 Toro waldo

Sriyam T 4003 Boxo waldo

Sriyam T 4003 Abon waldo

Sriyam T 4003 Vtox waldo

Sriyam T 4003 Ghok waldo

Sriyam T 4003 Tibn waldo

Sriyam T 4003 Tibn waldo

Sriyam T 4003 Ghok waldo

32 rows selected.

2.

SQL> select \* from Acc\_transaction where to\_char(Txn\_date, 'yyyy') = 2002;

no rows selected

SQL> select \* from Acc\_transaction where to\_char(Txn\_date, 'yyyy') = 2017;

TXN\_ID AMOUNT FUNDS\_AVA TXN\_DATE TXN\_TYPE\_C ACCOUNT\_ID EXECUTION\_BRANCH\_ID TELLER\_EMP\_ID

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

678008 67900 20-JAN-19 30-JUL-17 ti889 202 2 4003

568811 678456920 20-JAN-19 30-JUL-17 bv654 201 1 4003

4.

SQL> select e.First\_name, b.Name, c.Cust\_id, a.Account\_id from Employee e, Branch b, Customer c, ACCOUNT a where Avail\_balance = Pending\_balance;

no rows selected

5.

SQL> select e.Dept\_id, d.Name from Employee e, Department d where e.Dept\_id != d.Dept\_id;

DEPT\_ID NAME

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

101 anne

101 frank

101 simpson

101 waldo

101 edward

102 jacob

102 frank

102 simpson

102 waldo

102 edward

102 jacob

DEPT\_ID NAME

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

102 frank

102 simpson

102 waldo

102 edward

107 jacob

107 anne

107 frank

107 simpson

107 edward

20 rows selected.