Author : Pradyot Patil

Roll No : 53 [6A]

Date : 28-January-2018

```
****************************************************************************
           QUERY-01: Creating database using DDL statements
****************************************************************************
CREATE TABLE CUSTOMER(
  2        C_CODE NUMBER(5) NOT NULL,
  3        LNAME VARCHAR(10) NOT NULL,
  4        FNAME VARCHAR(10) NOT NULL,
  5        C_AREA NUMBER(3) NOT NULL,
  6        C_PHONE NUMBER(7) NOT NULL,
  7        BALANCE NUMBER(7,2) default 0,
  8        CONSTRAINT CUSTOMER_PK_C_CODE PRIMARY KEY(C_CODE),
  9        CONSTRAINT CUSTOMER_CK_C_CODE CHECK(C_CODE BETWEEN 10010 AND 99999 ),
 10        CONSTRAINT CUSTOMER_CK_C_AREA CHECK (C_AREA BETWEEN 501 AND 999)
 11        );
```

Table created.

```
CREATE TABLE VENDOR(
  2        V_CODE NUMBER(5) NOT NULL,
  3        V_NAME VARCHAR(30) NOT NULL,
  4        V_CONTACT VARCHAR(20) NOT NULL,
  5        V_AREA NUMBER(3) NOT NULL,
  6        V_PHONE NUMBER(7) NOT NULL,
  7        V_STATE CHAR(2) NOT NULL,
  8        V_ORDER CHAR(1) DEFAULT 'N',
  9        CONSTRAINT VENDOR_PK_V_CODE PRIMARY KEY(V_CODE),
 10        CONSTRAINT VENDOR_CK_V_CODE CHECK(V_CODE BETWEEN 21000 AND 99999 ),
 11        CONSTRAINT VENDOR_CK_V_AREA CHECK (V_AREA BETWEEN 501 AND 999),
 12        CONSTRAINT VENDOR_CK_V_STATE CHECK (V_STATE IN ('TN','FL','KY','GA'))
 13        );
```

Table created.

```
CREATE TABLE INVOICE (
```

```
  2   INV_NUM NUMBER(4) NOT NULL,
  3    C_CODE NUMBER(5) NOT NULL,
  4    INV_DATE DATE NOT NULL,
  5    CONSTRAINT INVOICE_PK_INV_NUM PRIMARY KEY(INV_NUM),
  6    CONSTRAINT INVOICE_CK_INV_NUM CHECK(INV_NUM BETWEEN 1001 AND 9999),
  7    CONSTRAINT INVOICE_FK_C_CODE FOREIGN KEY(C_CODE) REFERENCES CUSTOMER(C_CODE)
  8    );

Table created.

CREATE TABLE PRODUCT(
  2    P_CODE CHAR(5) NOT NULL,
  3    DESCRIPT VARCHAR(30) NOT NULL,
  4    P_DATE DATE NOT NULL,
  5    QTY NUMBER(4) NOT NULL,
  6    P_MIN NUMBER(3) NOT NULL,
  7    P_PRICE NUMBER(6,2) NOT NULL,
  8    P_DISC NUMBER(2,2) DEFAULT 0,
  9    V_CODE NUMBER(5) NOT NULL,
 10    CONSTRAINT PRODUCT_PK_P_CODE PRIMARY KEY(P_CODE),
 11    CONSTRAINT PRODUCT_CK_P_MIN CHECK(P_MIN < QTY ),
 12    CONSTRAINT PRODUCT_FK_V_CODE FOREIGN KEY (V_CODE) REFERENCES VENDOR(V_CODE)
 13    );

Table created.

CREATE TABLE LINE (
  2  INV_NUM NUMBER(4) NOT NULL,
  3  L_NUM NUMBER(1) NOT NULL,
  4  P_CODE CHAR(5) NOT NULL,
  5  L_UNITS NUMBER(3) NOT NULL,
  6  L_PRICE NUMBER(5,2) NOT NULL,
  7  CONSTRAINT LINE_PK_INV_NUM_L_NUM PRIMARY KEY(INV_NUM,L_NUM),
  8  CONSTRAINT LINE_CK_L_NUM CHECK(L_NUM BETWEEN 1 AND 9),
  9  CONSTRAINT LINE_CK_L_UNITS CHECK(L_UNITS > 0),
 10  CONSTRAINT LINE_CK_L_PRICE CHECK(L_PRICE > 0),
 11  CONSTRAINT LINE_FK_P_CODE FOREIGN KEY(P_CODE) REFERENCES PRODUCT(P_CODE),
 12  CONSTRAINT LINE_FK_INV_NUM FOREIGN KEY(INV_NUM) REFERENCES INVOICE(INV_NUM)
 13  );

Table created.
```

```
*************************************************************************
      QUERY-02: Populate the database with sample contents.
*************************************************************************
INSERT INTO CUSTOMER VALUES (10010, 'Anderson', 'James', 615, 2933893, 0.00);
1 row created.
INSERT INTO CUSTOMER VALUES (10011, 'Kurtis', 'Elena', 713, 2753455, 0.00);
1 row created.
INSERT INTO CUSTOMER VALUES (10012, 'Smith', 'Kathy', 615, 2873453, 345.86);
1 row created.
INSERT INTO CUSTOMER VALUES (10013, 'Paul', 'Chris', 615, 2879998, 536.75);
1 row created.
INSERT INTO CUSTOMER VALUES (10014, 'Johnson','Bill',615,2455533,0.00);
1 row created.
INSERT INTO CUSTOMER VALUES (10015, 'Samuels','Julia',713,2345432,0.00);
1 row created.
INSERT INTO CUSTOMER VALUES (10018, 'Harris','Anne ',615,2233445,221.19);
1 row created.
INSERT INTO CUSTOMER VALUES (10016, 'Ford ','Gustav',615,2223444,768.93);
1 row created.
INSERT INTO CUSTOMER VALUES (10017, 'Lee','Ming ',713,2323234,216.55);
1 row created.
INSERT INTO CUSTOMER VALUES (10019, 'Green','Walter',615,2786403,0.00);
1 row created.


INSERT INTO VENDOR VALUES(21225, 'Bryson, Inc.', 'Bella', 615, 2453628, 'TN', 'Y');
1 row created.
INSERT INTO VENDOR VALUES(21226 ,'SuperLoo, Inc.', 'Ching-Hun', 904, 3876330, 'FL',
'N');
1 row created.
INSERT INTO VENDOR VALUES(21231 ,'GnB Supply' ,'Samson',615, 2889922, 'TN', 'Y');
1 row created.
INSERT INTO VENDOR VALUES(21344 ,'Gomez Sons', 'Mark', 615, 2986363, 'KY', 'N');
1 row created.
INSERT INTO VENDOR VALUES(22587 ,'Downing, Inc.', 'Simon Singh', 901, 3985333,
'GA', 'N');
1 row created.
INSERT INTO VENDOR VALUES(23119 ,'Blackman Sisters', 'Svetlana', 901, 3562429,
'GA', 'Y');
1 row created.
INSERT INTO VENDOR VALUES(24004 ,'Almeda House', 'Almeda', 615, 2787878, 'TN', 'N')
;
1 row created.
```

```sql
INSERT INTO VENDOR VALUES(24288 ,'Justin Stores', 'Gracy Yu', 615, 2543333,
'TN','Y');
```
1 row created.
```sql
INSERT INTO VENDOR VALUES(25443 ,'Super Systems', 'Ted Hwang', 904, 3561111, 'FL',
'N');
```
1 row created.
```sql
INSERT INTO VENDOR VALUES(25501 ,'Silvermines Ltd.', 'Anne White', 615, 2983455,
'TN', 'N');
```
1 row created.
```sql
INSERT INTO VENDOR VALUES(25595 ,'HighEnd Supplies', 'Smith', 904, 3098773, 'FL',
'Y');
```
1 row created.


```sql
INSERT INTO PRODUCT VALUES('AB112', 'Power Painter', '03-NOV-2011', 8, 5, 109.99,
0.00, 25595);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('SB725', '7.25in Saw Blade', '13-DEC-2011', 32, 15,
14.99, 0.05, 21344);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('SB900', '9.00 in Saw Blade', '13-NOV-2011', 18, 12,
17.49, 0.00, 21344);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('CL025', 'Hrd. Cloth 1/4in', '15-JAN-2012', 15, 8,
39.95, 0.00, 23119);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('CL050', 'Hrd. Cloth 1/2in', '15-JAN-2012', 23, 5,
43.99, 0.00, 23119);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('JB012', 'Jigsaw 12in Blade', '30-DEC-2011', 8, 5,
109.92, 0.05, 24288);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('JB008', 'Jigsaw 8in Blade', '24-DEC-2011', 6, 5, 99.87,
0.05, 24288);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('CD00X', 'Cordless Drill', '20-JAN-2012', 12, 5, 38.95,
0.05, 25595);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('CH10X', 'Claw Hammer', '20-JAN-2012', 23, 10, 9.95,
0.10, 21225);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('SH100', 'Sledge Hammer', '02-JAN-2012', 8, 5, 14.40,
0.05, 21225);
```
1 row created.
```sql
INSERT INTO PRODUCT VALUES('RF100', 'Rat Tail File', '15-DEC-2011', 43, 20, 4.99,
0.00, 21344);
```

```
1 row created.
INSERT INTO PRODUCT VALUES('HC100', 'Hicut Chain Saw', '07-FEB-2012', 11, 5,
256.99, 0.05, 24288);
1 row created.
INSERT INTO PRODUCT VALUES('PP101', 'PVC Pipe', '20-FEB-2012', 188, 75, 5.87, 0.00,
24288);
1 row created.
INSERT INTO PRODUCT VALUES('MC001', 'Metal Screw', '01-MAR-2012', 172, 75, 6.99,
0.00, 21225);
1 row created.
INSERT INTO PRODUCT VALUES('WC025', '2.5in wide Screw', '24-FEB-2012', 237, 100,
8.45, 0.00, 21231);
1 row created.
INSERT INTO PRODUCT VALUES('SM48X', 'Steel Malting Mesh', '17-JAN-2012', 18, 5,
119.95, 0.10, 25595);
1 row created.


INSERT INTO INVOICE VALUES(1001, 10014, '16-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1002, 10011, '16-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1003, 10012, '16-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1004, 10017, '17-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1005, 10011, '17-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1006, 10014, '17-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1007, 10015, '17-JAN-12');
1 row created.
INSERT INTO INVOICE VALUES(1008, 10011, '17-JAN-12');
1 row created.


INSERT INTO LINE VALUES(1001, 1, 'SB725', 1, 14.99);
1 row created.
INSERT INTO LINE VALUES(1001, 2, 'CH10X', 1, 9.95) ;
1 row created.
INSERT INTO LINE VALUES(1002, 1, 'RF100', 2, 4.99 );
1 row created.
INSERT INTO LINE VALUES(1003, 1, 'CD00X', 1, 38.95);
1 row created.
INSERT INTO LINE VALUES(1003, 2, 'CL025', 1, 39.95 );
```

1 row created.

INSERT INTO LINE VALUES(1003, 3, 'SB725', 5, 14.99);

1 row created.

INSERT INTO LINE VALUES(1004, 2, 'RF100', 3, 4.99);

1 row created.

INSERT INTO LINE VALUES(1004, 3, 'CH10X', 2, 9.95);

1 row created.

INSERT INTO LINE VALUES(1005, 1, 'PP101', 12, 5.87);

1 row created.

INSERT INTO LINE VALUES(1006, 1, 'MC001', 3, 6.99);

1 row created.

INSERT INTO LINE VALUES(1006, 2, 'JB012', 1, 109.92);

1 row created.

INSERT INTO LINE VALUES(1006, 3, 'CH10X', 1, 9.95);

1 row created.

INSERT INTO LINE VALUES(1006, 4, 'HC100', 1, 256.99);

1 row created.

INSERT INTO LINE VALUES(1007, 1, 'SB725', 2, 14.99);

1 row created.

INSERT INTO LINE VALUES(1007, 2, 'RF100', 1, 4.99);

1 row created.

INSERT INTO LINE VALUES(1008, 1, 'PP101', 5, 5.87);

1 row created.

INSERT INTO LINE VALUES(1008, 2, 'SM48X', 3, 119.95);

1 row created.

INSERT INTO LINE VALUES(1008, 3, 'CH10X', 1, 9.95);

1 row created.


```
**************************************************************************
      QUERY-03: For each table of SalesCo database, list all the enforced
      constraints. (Use USER_CONSTRAINTS)
**************************************************************************
```

SELECT CONSTRAINT_NAME,TABLE_NAME,SEARCH_CONDITION,GENERATED FROM USER_CONSTRAINTS WHERE TABLE_NAME= 'CUSTOMER' ;

CONSTRAINT_NAME	TABLE_NAME	SEARCH_CONDITION	GENERATED
SYS_C0011057	CUSTOMER	"C_CODE" IS NOT NULL	GENERATED NAME
SYS_C0011058	CUSTOMER	"LNAME" IS NOT NULL	GENERATED NAME
SYS_C0011059	CUSTOMER	"FNAME" IS NOT NULL	GENERATED NAME
SYS_C0011060	CUSTOMER	"C_AREA" IS NOT NULL	GENERATED NAME
SYS_C0011061	CUSTOMER	"C_PHONE" IS NOT NULL	GENERATED NAME
CUSTOMER_CK_C_CODE	CUSTOMER	C_CODE BETWEEN 10010 AND 99999	USER NAME

```
       CUSTOMER_CK_C_AREA CUSTOMER        C_AREA BETWEEN 501 AND 999     USER NAME
       CUSTOMER_PK_C_CODE CUSTOMER                                       USER NAME


8 rows selected.


SQL> SELECT CONSTRAINT_NAME,TABLE_NAME,SEARCH_CONDITION,GENERATED FROM
USER_CONSTRAINTS WHERE TABLE_NAME= 'PRODUCT' ;


CONSTRAINT_NAME         TABLE_NAME      SEARCH_CONDITION        GENERATED
----------------        ----------      -----------------       --------------
SYS_C0011081            PRODUCT         "P_CODE" IS NOT NULL     GENERATED NAME
SYS_C0011082            PRODUCT         "DESCRIPT" IS NOT NULL   GENERATED NAME
SYS_C0011083            PRODUCT         "P_DATE" IS NOT NULL     GENERATED NAME
SYS_C0011084            PRODUCT         "QTY" IS NOT NULL        GENERATED NAME
SYS_C0011085            PRODUCT         "P_MIN" IS NOT NULL      GENERATED NAME
SYS_C0011086            PRODUCT         "P_PRICE" IS NOT NULL    GENERATED NAME
SYS_C0011087            PRODUCT         "V_CODE" IS NOT NULL     GENERATED NAME
PRODUCT_CK_P_MIN        PRODUCT          P_MIN < QTY            USER NAME
PRODUCT_PK_P_CODE       PRODUCT                                  USER NAME


9 rows selected.


SQL> SELECT CONSTRAINT_NAME,TABLE_NAME,SEARCH_CONDITION,GENERATED FROM
USER_CONSTRAINTS WHERE TABLE_NAME= 'VENDOR' ;


CONSTRAINT_NAME      TABLE_NAME    SEARCH_CONDITION               GENERATED
---------------      -----------   ------------------------       -------------
SYS_C0011091         VENDOR        "V_CODE" IS NOT NULL           GENERATED NAME
SYS_C0011092         VENDOR        "V_NAME" IS NOT NULL           GENERATED NAME
SYS_C0011093         VENDOR        "V_CONTACT" IS NOT NULL        GENERATED NAME
SYS_C0011094         VENDOR        "V_AREA" IS NOT NULL           GENERATED NAME
SYS_C0011095         VENDOR        "V_PHONE" IS NOT NULL          GENERATED NAME
SYS_C0011096         VENDOR        "V_STATE" IS NOT NULL          GENERATED NAME
VENDOR_CK_V_CODE     VENDOR        V_CODE BETWEEN 21000 AND 99999 USER NAME
VENDOR_CK_V_AREA     VENDOR        V_AREA BETWEEN 501 AND 999     USER NAME
VENDOR_CK_V_STATE    VENDOR        V_STATE IN ('TN','FL','KY','GA') USER NAME
VENDOR_PK_V_CODE     VENDOR                                       USER NAME


10 rows selected.


SQL> SELECT CONSTRAINT_NAME,TABLE_NAME,SEARCH_CONDITION,GENERATED FROM
USER_CONSTRAINTS WHERE TABLE_NAME= 'INVOICE' ;
```

```
CONSTRAINT_NAME       TABLE_NAME   SEARCH_CONDITION          GENERATED

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

SYS_C0011075          INVOICE      "INV_NUM" IS NOT NULL     GENERATED NAME
SYS_C0011076          INVOICE      "C_CODE" IS NOT NULL      GENERATED NAME
SYS_C0011077          INVOICE      "INV_DATE" IS NOT NULL    GENERATED NAME
INVOICE_CK_INV_NUM    INVOICE      INV_NUM BETWEEN 1001 AND 9999   USER NAME
INVOICE_PK_INV_NUM    INVOICE                                USER NAME
INVOICE_FK_C_CODE     INVOICE                                USER NAME


6 rows selected.
```

**SQL> SELECT CONSTRAINT_NAME,TABLE_NAME,SEARCH_CONDITION,GENERATED FROM
USER_CONSTRAINTS WHERE TABLE_NAME= 'LINE' ;**

```
CONSTRAINT_NAME         TABLE_NAME   SEARCH_CONDITION         GENERATED

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

SYS_C0011101            LINE         "INV_NUM" IS NOT NULL     GENERATED NAME
SYS_C0011102            LINE         "L_NUM" IS NOT NULL       GENERATED NAME
SYS_C0011103            LINE         "P_CODE" IS NOT NULL      GENERATED NAME
SYS_C0011104            LINE         "L_UNITS" IS NOT NULL     GENERATED NAME
SYS_C0011105            LINE         "L_PRICE" IS NOT NULL     GENERATED NAME
LINE_CK_L_NUM           LINE         L_NUM BETWEEN 1 AND 9     USER NAME
LINE_CK_L_UNITS         LINE         L_UNITS > 0               USER NAME
LINE_CK_L_PRICE         LINE         L_PRICE > 0               USER NAME
LINE_PK_INV_NUM_L_NUM   LINE                                  USER NAME
LINE_FK_P_CODE          LINE                                  USER NAME
LINE_FK_INV_NUM         LINE                                  USER NAME


11 rows selected.


****************************************************************************
      QUERY-04: List the contents of all the tables in the database.
****************************************************************************
```
SELECT * FROM CUSTOMER ;

```
C_CODE     LNAME      FNAME      C_AREA     C_PHONE    BALANCE

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

     10010 Anderson   James         615     2933893          0
     10011 Kurtis     Elena         713     2753455          0
     10012 Smith      Kathy         615     2873453     345.86
     10013 Paul       Chris         615     2879998     536.75
     10014 Johnson    Bill          615     2455533          0
     10015 Samuels    Julia         713     2345432          0
```

```
   10016 Ford        Gustav            615    2223444    768.93
   10017 Lee         Ming              713    2323234    216.55
   10019 Green       Walter            615    2786403         0
   10018 Harris      Anne              615    2233445    221.19
   10020 Dawson      Grace             904    3562098    452.99
```

SELECT * FROM VENDOR ;

```
V_CODE V_NAME                V_CONTACT           V_AREA  V_PHONE V_STATE V_ORDER
------ --------------------- ------------------- ------- -------- ------- -------
 21225 Bryson, Inc.          Bella                   615  2453628   TN        Y
 21226 SuperLoo, Inc.        Ching-Hun               904  3876330   FL        N
 21231 GnB Supply            Samson                  615  2889922   TN        Y
 21344 Gomez Sons            Mark                    615  2986363   KY        N
 22587 Downing, Inc.         Simon Singh             901  3985333   GA        N
 23119 Blackman Sisters      Svetlana                901  3562429   GA        Y
 24004 Almeda House          Almeda                  615  2787878   TN        N
 24288 Justin Stores         Gracy Yu                615  2543333   TN        Y
 25443 Super Systems         Ted Hwang               904  3561111   FL        N
 25501 Silvermines Ltd.      Anne White              615  2983455   TN        N
 25595 HighEnd Supplies      Smith                   904  3098773   FL        Y
 24992 Martha Associates     Jasmine Ray             904  2863322   KY        Y
```

```
12 rows selected.
```

SQL> SELECT * FROM PRODUCT ;

```
P_COD DESCRIPT                       P_DATE    QTY P_MIN P_PRICE P_DISC   V_CODE
----- ------------------------------ --------- ---- ------ ------- -------- ------
AB112 Power Painter                  03-NOV-11    8     5  109.99        0 25595
SB725 7.25in Saw Blade               13-DEC-11   32    15   14.99      .05 21344
SB900 9.00 in Saw Blade              13-NOV-11   18    12   17.49        0 21344
CL025 Hrd. Cloth 1/4in               15-JAN-12   15     8   39.95        0 23119
CL050 Hrd. Cloth 1/2in               15-JAN-12   23     5   43.99        0 23119
JB012 Jigsaw 12in Blade              30-DEC-11    8     5  109.92      .05 24288
JB008 Jigsaw 8in Blade               24-DEC-11    6     5   99.87      .05 24288
CD00X Cordless Drill                 20-JAN-12   12     5   38.95      .05 25595
CH10X Claw Hammer                    20-JAN-12   23    10    9.95       .1 21225
SH100 Sledge Hammer                  02-JAN-12    8     5    14.4      .05 21225
RF100 Rat Tail File                  15-DEC-11   43    20    4.99        0 21344
HC100 Hicut Chain Saw                07-FEB-12   11     5  256.99      .05 24288
PP101 PVC Pipe                       20-FEB-12  188    75    5.87        0 24288
```

```
MC001 Metal Screw                     01-MAR-12  172   75     6.99        0 21225
WC025 2.5in wide Screw                24-FEB-12  237  100     8.45        0 21231
SM48X Steel Malting Mesh              17-JAN-12   18    5   119.95       .1 25595
HH15X Hanging Hook 15in               10-JAN-13  200   25     5.75        0 24992


17 rows selected.

SQL> SELECT * FROM INVOICE ;


   INV_NUM     C_CODE   INV_DATE
---------- ---------- ---------
      1001      10014  16-JAN-12
      1002      10011  16-JAN-12
      1003      10012  16-JAN-12
      1004      10017  17-JAN-12
      1005      10011  17-JAN-12
      1006      10014  17-JAN-12
      1007      10015  17-JAN-12
      1008      10011  17-JAN-12
      1009      10020  22-JUN-13


9 rows selected.

SQL> SELECT * FROM LINE ;


   INV_NUM      L_NUM P_COD    L_UNITS    L_PRICE
---------- ---------- ----- ---------- ----------
      1001          1 SB725          1      14.99
      1001          2 CH10X          1       9.95
      1002          1 RF100          2       4.99
      1003          1 CD00X          1      38.95
      1003          2 CL025          1      39.95
      1003          3 SB725          5      14.99
      1004          2 RF100          3       4.99
      1004          3 CH10X          2       9.95
      1005          1 PP101         12       5.87
      1006          1 MC001          3       6.99
      1006          2 JB012          1     109.92
      1006          3 CH10X          1       9.95
      1006          4 HC100          1     256.99
      1007          1 SB725          2      14.99
      1007          2 RF100          1       4.99
```

```
    1008          1 PP101        5       5.87
    1008          2 SM48X        3     119.95
    1008          3 CH10X        1       9.95
    1009          1 HH15X       20       5.5
```

19 rows selected.
****
QUERY-05: Write SQL code to insert a LINE record – 1009, 1, HH15X, 20, 5.50.
What are the problems encountered? What are the additional requirements?
Assume that the 200 units of the product –Hanging Hook 15in‖ were supplied
by–Martha Associates‖ located in –KY' at unit price of 5.75 on January 10,
2013.Minimum stock quantity was anticipated to be 25. The line was billed to
Grace Dawson located in area 904 with phone 3562098 and a balance of 452.99
on June 22, 2013. The supplier with ID 24992 has a contact named –Jasmine
Ray‖ with phone 2863322.
****
INSERT INTO LINE VALUES (1009,1,'HH15X',20,5.5) ;

ERROR at line 1:
ORA-02291: integrity constraint (SYSTEM.LINE_FK_INV_NUM) violated - parent key not
found

Additional requirement : C_CODE of Grace Dawson - 10020
INSERT INTO CUSTOMER VALUES (10020, 'Dawson', 'Grace', 904, 3562098, 452.99);
1 row created.
INSERT INTO VENDOR VALUES(24992, 'Martha Associates', 'Jasmine Ray', 904, 2863322,
'KY', 'Y');
1 row created.
INSERT INTO PRODUCT VALUES('HH15X', 'Hanging Hook 15in', '10-JAN-2013', 200, 25,
5.75, 0.00, 24992);
1 row created.
INSERT INTO INVOICE VALUES(1009, 10020, '22-JUN-13');
1 row created.
INSERT INTO LINE VALUES(1009, 1, 'HH15X', 20, 5.50) ;
1 row created.
****
QUERY-06: SQL code that will list P_CODE, DESCRIPT, V_CODE for all
products that are some kind of blades.
****
SELECT P_CODE,DESCRIPT,V_CODE FROM PRODUCT WHERE DESCRIPT LIKE '%Blade' ;

```
P_COD DESCRIPT                        V_CODE
----- ------------------------------ ----------
SB725 7.25in Saw Blade                   21344
```

```
SB900 9.00 in Saw Blade              21344
JB012 Jigsaw 12in Blade              24288
JB008 Jigsaw 8in Blade               24288
```

4 rows selected.
****
     QUERY-07: Write the SQL code that will list for all zero-balance customers
     their names, phone numbers and customer IDs. You must but ensure that in the
     output the name is a single field that combines first name followed by last
     name of the customer.
****

SELECT (FNAME || ' ' || LNAME) AS NAME,C_PHONE,C_CODE FROM CUSTOMER WHERE
BALANCE='0.00' ;

```
NAME                  C_PHONE     C_CODE
--------------------- ----------  ----------
James Anderson        2933893     10010
Elena Kurtis          2753455     10011
Bill Johnson          2455533     10014
Julia Samuels         2345432     10015
Walter Green          2786403     10019
```

5 rows selected.
****
     QUERY-08: SQL code that will list all products which were added to inventory
     during 2012.
****

SELECT * FROM PRODUCT WHERE P_DATE LIKE '%12' ;

P_COD DESCRIPT	P_DATE	QTY	P_MIN	P_PRICE	P_DISC	V_CODE
CL025 Hrd. Cloth 1/4in	15-JAN-12	15	8	39.95	0	23119
CL050 Hrd. Cloth 1/2in	15-JAN-12	23	5	43.99	0	23119
CD00X Cordless Drill	20-JAN-12	12	5	38.95	.05	25595
CH10X Claw Hammer	20-JAN-12	23	10	9.95	.1	21225
SH100 Sledge Hammer	02-JAN-12	8	5	14.4	.05	21225
HC100 Hicut Chain Saw	07-FEB-12	11	5	256.99	.05	24288
PP101 PVC Pipe	20-FEB-12	188	75	5.87	0	24288
MC001 Metal Screw	01-MAR-12	172	75	6.99	0	21225
WC025 2.5in wide Screw	24-FEB-12	237	100	8.45	0	21231
SM48X Steel Malting Mesh	17-JAN-12	18	5	119.95	.1	25595

10 rows selected.