

Practical 7: Study of various types of SET OPERATORS

Suppose that a Product table contains two attributes, PROD_CODE and VEND_CODE. The values for the PROD_CODE are: ABC, DEF, GHI and JKL. These are matched by the following values for the VEND_CODE: 125, 124, 124 and 123, respectively (e.g., PROD_CODE value ABC corresponds to VEND_CODE value 125). The Vendor table contains a single attribute, VEND_CODE, with values 123, 124, 125 and 126. (The VEND_CODE attribute in the Product table is a foreign key to the VEND_CODE in the Vendor table.)

```
SQL> CREATE TABLE VENDOR(VEND_CODE INT PRIMARY KEY);
Table created.
SQL> create table product(PROD_CODE VARCHAR(3),VEND_CODE INT, FOREIGN KEY(VEND_CODE) REFERENCES VENDOR(VEND_CODE));
Table created.
SQL> INSERT INTO VENDOR VALUES(123);
1 row created.
SQL> INSERT INTO VENDOR VALUES(124);
1 row created.
SQL> INSERT INTO VENDOR VALUES(125);
1 row created.
SQL> INSERT INTO VENDOR VALUES(126);
1 row created.
SQL> INSERT INTO PRODUCT VALUES('ABC',125);
1 row created.
SQL> INSERT INTO PRODUCT VALUES('DEF',124);
1 row created.
SQL> INSERT INTO PRODUCT VALUES('GHI',124);
1 row created.
SQL> INSERT INTO PRODUCT VALUES('JKL',123);
1 row created.
```

Given the information, what would be the query output for the following? Show values.

```
SQL> SELECT *FROM PRODUCT;

PRO  VEND_CODE
---  -
ABC      125
DEF      124
GHI      124
JKL      123
SQL> █
```

a) A UNION query based on these two tables

```
SQL> SELECT VEND_CODE FROM VENDOR
2 UNION
3 SELECT VEND_CODE FROM PRODUCT;

VEND_CODE
-----
123
124
125
126
```

b) A UNION ALL query based on these two tables

```
SQL> SELECT VEND_CODE FROM VENDOR
2 UNION ALL
3 SELECT VEND_CODE FROM PRODUCT;

VEND_CODE
-----
123
124
125
126
125
124
124
123

8 rows selected.
```

c) An INTERSECT query based on these two tables

```
SQL> SELECT VEND_CODE FROM VENDOR
2 INTERSECT
3 SELECT VEND_CODE FROM PRODUCT;

VEND_CODE
-----
123
124
125
```

d) A MINUS query based on these two tables

```
SQL> SELECT VEND_CODE FROM VENDOR
2 MINUS
3 SELECT VEND_CODE FROM PRODUCT;

VEND_CODE
-----
126
```

