PART - 1

(a)

CREATE TABLE VENDORS5 AS

SELECT \*

FROM VENDORS;

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

CREATE TABLE INVOICES5 AS

SELECT \*

FROM INVOICES;

(b)

ALTER TABLE VENDORS5

ADD CONSTRAINT VENDORS5\_PK

PRIMARY KEY (VENDOR\_ID);

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

ALTER TABLE VENDORS5

ADD CONSTRAINT VENDORS5\_VENDOR\_NAME\_UQ

UNIQUE (VENDOR\_NAME);

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

ALTER TABLE VENDORS5

ADD CONSTRAINT VENDORS5\_FK\_TERMS

FOREIGN KEY (DEFAULT\_TERMS\_ID)

REFERENCES TERMS (TERMS\_ID);

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

ALTER TABLE VENDORS5

ADD CONSTRAINT VENDORS5\_FK\_ACCOUNTS

FOREIGN KEY (DEFAULT\_ACCOUNT\_NUMBER)

REFERENCES GENERAL\_LEDGER\_ACCOUNTS (ACCOUNT\_NUMBER);

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

ALTER TABLE INVOICES5

ADD CONSTRAINT INVOICES5\_PK

PRIMARY KEY (INVOICE\_ID);

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

ALTER TABLE INVOICES5

ADD CONSTRAINT INVOICES5\_FK\_VENDORS

FOREIGN KEY (VENDOR\_ID)

REFERENCES VENDORS5 (VENDOR\_ID);

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

ALTER TABLE INVOICES5

ADD CONSTRAINT INVOICES5\_FK\_TERMS

FOREIGN KEY (TERMS\_ID)

REFERENCES TERMS (TERMS\_ID);

(c)

-- QUESTION 1 : QUERY 3 : ALTERING TABLE INVOICES5 TO ADD NEW COLUMN BALANCE\_DUE.

ALTER TABLE INVOICES5

ADD BALANCE NUMBER(9,2);

(D)

-- QUESTION 1 : QUERY 4 : UPDATING TABLE INVOICES5 TO ADD DATA IN BALANCE\_DUE COLUMN.

UPDATE INVOICES5

SET BALANCE = INVOICES5.INVOICE\_TOTAL- INVOICES5.PAYMENT\_TOTAL - INVOICES5.CREDIT\_TOTAL;

**OR**

UPDATE INVOICES5

SET BALANCE = INVOICE\_TOTAL- PAYMENT\_TOTAL - CREDIT\_TOTAL;

PART - 2

(A)

-- QUESTION 2 : PART 1: INSERTING VALUES IN NEWLY CREAETD TABLE WITH USE OF VARIABLES.

DECLARE

X NUMBER;

Y NUMBER;

BEGIN

SELECT COUNT(\*) INTO X FROM VENDORS5;

INSERT INTO VENDORS5

VALUES (X+2,'Advait Patel, LLC','420 Lotus Lane',NULL,'Glenview','IL',60025,8475084136,'Patel','Advait',3,620);

FOR I IN 1..3 LOOP

SELECT COUNT(\*) INTO Y FROM INVOICES5 ;

INSERT INTO INVOICES5

VALUES (Y+1,X+2,'12345-OUT',SYSDATE,2550.58,0,0,3,SYSDATE+30,NULL,2550.58);

END LOOP;

COMMIT;

END;

/

**OR**

CREATE OR REPLACE PROCEDURE MYPROC

AS

VENDOR\_ID\_P NUMBER;

VENDOR\_NAME\_P VARCHAR2 (50) := 'Advait, LLC';

VENDOR\_ADDRESS1\_P VARCHAR2 (50) := '420';

VENDOR\_ADDRESS2\_P VARCHAR2 (50) := 'Lotus Lane';

VENDOR\_CITY\_P VARCHAR2 (50) := 'GLENVIEW';

VENDOR\_STATE\_P CHAR (2) := 'IL';

VENDOR\_ZIP\_CODE\_P VARCHAR2 (20) := '60025';

VENDOR\_PHONE\_P VARCHAR (50) := '(847) 508-4136';

VENDOR\_CONTACT\_LAST\_NAME\_P VARCHAR2 (50) := 'Depaul';

VENDOR\_CONTACT\_FIRST\_NAME\_P VARCHAR2 (50) := 'University';

DEFAULT\_TERMS\_ID\_P NUMBER := 5;

DEFAULT\_ACCOUNT\_NUMBER\_P NUMBER := 507;

INVOICE\_ID\_P NUMBER;

INVOICE\_NUMBER\_P VARCHAR2 (50) := 'AP4200';

INVOICE\_DATE\_P DATE := SYSDATE;

INVOICE\_TOTAL\_P NUMBER (9, 2) := 1178.63;

PAYMENT\_TOTAL\_P NUMBER (9, 2) := 0;

CREDIT\_TOTAL\_P NUMBER (9, 2) := 0;

TERMS\_ID\_P NUMBER := 5;

INVOICE\_DUE\_DATE\_P DATE;

PAYMENT\_DATE\_P DATE;

BALANCE\_P NUMBER ;

i NUMBER := 1 ;

BEGIN

SELECT MAX (VENDOR\_ID) + 1 INTO VENDOR\_ID\_P FROM VENDORS5;

INSERT INTO VENDORS5 VALUES (VENDOR\_ID\_P,

VENDOR\_NAME\_P,

VENDOR\_ADDRESS1\_P,

VENDOR\_ADDRESS2\_P,

VENDOR\_CITY\_P,

VENDOR\_STATE\_P,

VENDOR\_ZIP\_CODE\_P,

VENDOR\_PHONE\_P,

VENDOR\_CONTACT\_LAST\_NAME\_P,

VENDOR\_CONTACT\_FIRST\_NAME\_P,

DEFAULT\_TERMS\_ID\_P,

DEFAULT\_ACCOUNT\_NUMBER\_P);

WHILE i<4 LOOP

SELECT MAX (INVOICE\_ID) + 1 INTO INVOICE\_ID\_P FROM INVOICES5;

SELECT SYSDATE + INTERVAL '30' DAY INTO INVOICE\_DUE\_DATE\_P FROM DUAL;

INSERT INTO INVOICES5 VALUES (INVOICE\_ID\_P,

VENDOR\_ID\_P,

INVOICE\_NUMBER\_P,

INVOICE\_DATE\_P,

INVOICE\_TOTAL\_P,

PAYMENT\_TOTAL\_P,

CREDIT\_TOTAL\_P,

TERMS\_ID\_P,

INVOICE\_DUE\_DATE\_P,

PAYMENT\_DATE\_P,

BALANCE\_P);

INVOICE\_TOTAL\_P := INVOICE\_TOTAL\_P + 7000;

i := i + 1;

END LOOP;

END;

/

EXECUTE MYPROC;

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

(B)

CREATE OR REPLACE PROCEDURE UPDATEPROC

AS

VENDOR\_ID\_P NUMBER (9, 2);

BEGIN

SELECT MAX (VENDOR\_ID) INTO VENDOR\_ID\_P

FROM INVOICES5;

UPDATE INVOICES5

SET CREDIT\_TOTAL = INVOICE\_TOTAL \* 0.1

WHERE VENDOR\_ID = VENDOR\_ID\_P;

UPDATE INVOICES5

SET BALANCE = INVOICE\_TOTAL - (PAYMENT\_TOTAL + CREDIT\_TOTAL)

WHERE VENDOR\_ID = VENDOR\_ID\_P;

END;

/

EXECUTE UPDATEPROC;

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

OR

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

UPDATE INVOICES5

SET CREDIT\_TOTAL = (INVOICE\_TOTAL\*10)/100

WHERE VENDOR\_ID = (SELECT VENDOR\_ID FROM VENDORS5 WHERE VENDOR\_NAME = 'Advait Patel, LLC');

UPDATE INVOICES5

SET BALANCE = (INVOICE\_TOTAL - PAYMENT\_TOTAL - CREDIT\_TOTAL)

WHERE VENDOR\_ID = (SELECT VENDOR\_ID FROM VENDORS5 WHERE VENDOR\_NAME = 'Advait Patel, LLC');

PART - 3

(A)

SET LINESIZE 1000

COLUMN INVOICE\_TOTAL FORMAT $999,999,999.99

COLUMN CREDIT\_TOTAL FORMAT $999,999,999.99

COLUMN PAYMENT\_TOTAL FORMAT $999,999,999.99

COLUMN BALANCE FORMAT $999,999,999.99

COLUMN VENDOR\_NAME FORMAT A20

SELECT INVOICES5.VENDOR\_ID, VENDORS5.VENDOR\_NAME,INVOICE\_ID,

REPLACE(TO\_CHAR(INVOICE\_DATE, 'Month dd, yyyy'),' ','')AS INVOICE\_DATE ,

REPLACE( TO\_CHAR(INVOICE\_DUE\_DATE, 'Month dd, yyyy'),' ','') AS INVOICE\_DUE\_DATE , INVOICE\_TOTAL, CREDIT\_TOTAL, BALANCE

FROM INVOICES5

JOIN VENDORS5 ON VENDORS5.VENDOR\_ID = INVOICES5.VENDOR\_ID

WHERE INVOICES5.VENDOR\_ID = (SELECT MAX(VENDOR\_ID) FROM VENDORS5);

(B)

-------------------------------------------------- QUESTION : 3 : PART 2 : ENSURING THE DATABSE IS RESTORED IN ITS ININTIAL STATE.--------------------------------

-- AFTER USING DROP TABLE, THE DATABSE IS NOW IN ITS ORIGINAL STATE.

DROP TABLE INVOICES5;

DROP TABLE VENDORS5;

OUTPUTS

PART – 1

(A)

Table VENDORS5 created.

Table INVOICES5 created.

(B)

Table VENDORS5 altered.

Table VENDORS5 altered.

Table VENDORS5 altered.

Table VENDORS5 altered.

Table INVOICES5 altered.

Table INVOICES5 altered.

Table INVOICES5 altered.

Table INVOICES5 altered.

(C)

Table INVOICES5 altered.

(D)

114 rows updated.

OR

114 rows updated.

PART – 2

(A)

PL/SQL procedure successfully completed.

OR

Procedure MYPROC compiled

PL/SQL procedure successfully completed.

(B)

Procedure UPDATEPROC compiled

PL/SQL procedure successfully completed.

OR

3 rows updated.

3 rows updated.

PART – 3

(A)

VENDOR\_ID VENDOR\_NAME INVOICE\_ID INVOICE\_DATE INVOICE\_DUE\_DATE INVOICE\_TOTAL CREDIT\_TOTAL BALANCE

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

126 Advait, LLC 121 October26,2015 November25,2015 $1,178.63 $117.86 $1,060.77

126 Advait, LLC 122 October26,2015 November25,2015 $8,178.63 $817.86 $7,360.77

126 Advait, LLC 123 October26,2015 November25,2015 $15,178.63 $1,517.86 $13,660.77

(B)

Table INVOICES5 dropped.

Table VENDORS5 dropped.