-- QUESTION - 1

SELECT VENDOR\_ID, VENDOR\_NAME

FROM VENDORS

WHERE VENDOR\_ID IN

(SELECT VENDOR\_ID FROM Invoices WHERE INVOICE\_ID IN

(SELECT INVOICE\_ID from INVOICE\_LINE\_ITEMS where LINE\_ITEM\_DESCRIPTION like '%CICS%'))

UNION

SELECT VENDOR\_ID, VENDOR\_NAME

FROM VENDORS

WHERE VENDOR\_ID IN

(SELECT VENDOR\_ID FROM Invoices WHERE INVOICE\_ID IN

(SELECT INVOICE\_ID from INVOICE\_LINE\_ITEMS where LINE\_ITEM\_DESCRIPTION Like '%MVS%' ));

VENDOR\_ID VENDOR\_NAME

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

34 IBM

110 Malloy Lithographing Inc

-- QUESTION 2

SELECT VENDOR\_ID, VENDOR\_NAME

FROM VENDORS

WHERE VENDOR\_ID IN

(SELECT VENDOR\_ID FROM INVOICES WHERE INVOICE\_ID IN

(SELECT INVOICE\_ID FROM INVOICE\_LINE\_ITEMS ))

INTERSECT

SELECT VENDOR\_ID, VENDOR\_NAME

FROM VENDORS

WHERE VENDOR\_ID IN

(SELECT VENDOR\_ID FROM INVOICES WHERE INVOICE\_ID IN

(SELECT INVOICE\_ID FROM INVOICE\_LINE\_ITEMS WHERE LINE\_ITEM\_DESCRIPTION LIKE '%VSAM%' AND LINE\_ITEM\_DESCRIPTION LIKE '%MVS%' ));

no rows selected

-- QUESTION 3

SET LINESIZE 999

COLUMN VENDOR\_COUNT FORMAT A15

SELECT COUNT(\*) VENDOR\_COUNT

FROM (SELECT VENDOR\_ID FROM VENDORS

MINUS

SELECT VENDOR\_ID FROM INVOICES

UNION

SELECT VENDOR\_ID FROM INVOICES

WHERE INVOICE\_TOTAL - PAYMENT\_TOTAL - CREDIT\_TOTAL = 0);

/

VENDOR\_COUNT

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

113

-- QUESTION 4

SELECT DISTINCT VENDOR\_NAME,LINE\_ITEM\_DESCRIPTION

FROM INVOICES JOIN VENDORS USING (VENDOR\_ID)

JOIN INVOICE\_LINE\_ITEMS USING (INVOICE\_ID)

WHERE LOWER(LINE\_ITEM\_DESCRIPTION) LIKE LOWER('%Card%') OR LOWER(LINE\_ITEM\_DESCRIPTION) LIKE LOWER('%COBOL%')

ORDER BY LINE\_ITEM\_DESCRIPTION;

VENDOR\_NAME LINE\_ITEM\_DESCRIPTION

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Computerworld Card deck

Zylka Design Card deck

Cardinal Business Media, Inc. Card deck advertising

Zylka Design Card deck revision

Zylka Design Card revision

Zylka Design DB2 Card decks

Cahners Publishing Company PC card deck

Malloy Lithographing Inc VSAM for the Cobol Programmer

8 rows selected

-- QUESTION 05

DECLARE

COUNTER NUMBER;

MY\_VENDORS NUMBER;

AVERAGE\_INVOICES NUMBER (9,2);

VENDOR\_NAME VARCHAR2 (50 BYTE);

VENDOR\_INVOICES NUMBER;

CURSOR MY\_CURSOR IS SELECT VENDOR\_ID,

COUNT (\*) AS COUNT

FROM INVOICES

GROUP BY VENDOR\_ID;

CURSOR MY\_DISPLAY IS SELECT DISTINCT VENDOR\_ID, VENDOR\_NAME AS

VENDOR\_NAME,

COUNT (\*) AS COUNT\_INVOICES FROM INVOICES JOIN VENDORS USING(VENDOR\_ID)

GROUP BY VENDOR\_ID, VENDOR\_NAME

ORDER BY COUNT\_INVOICES DESC;

BEGIN

COUNTER := 0;

MY\_VENDORS := 0;

FOR ALL\_ROW IN MY\_CURSOR LOOP

MY\_VENDORS := MY\_VENDORS + 1;

COUNTER := (COUNTER + ALL\_ROW.COUNT);

END LOOP;

AVERAGE\_INVOICES := COUNTER/MY\_VENDORS;

FOR MY\_LOOP IN MY\_DISPLAY LOOP

IF MY\_LOOP.COUNT\_INVOICES > AVERAGE\_INVOICES THEN

DBMS\_OUTPUT.PUT\_LINE('VENDOR NAME: ' || MY\_LOOP.VENDOR\_NAME ||

CHR(10) || 'TOTAL\_INVOICES: ' || MY\_LOOP.COUNT\_INVOICES || CHR(10));

END IF;

END LOOP;

END;

PL/SQL procedure successfully completed.

VENDOR NAME: Federal Express Corporation

TOTAL\_INVOICES: 47

VENDOR NAME: United Parcel Service

TOTAL\_INVOICES: 9

VENDOR NAME: Zylka Design

TOTAL\_INVOICES: 8

VENDOR NAME: Pacific Bell

TOTAL\_INVOICES: 6

VENDOR NAME: Malloy Lithographing Inc

TOTAL\_INVOICES: 5

VENDOR NAME: Roadway Package System, Inc

TOTAL\_INVOICES: 4

-- QUESTION 06

SET LINESIZE 1000

COLUMN TITLE FORMAT A15

COLUMN USBOXOFFICE FORMAT $999,999,999.00

COLUMN WORLDBOXOFFICE FORMAT $999,999,999.00

SELECT TITLE, RELEASEYEAR, USBOXOFFICE, WORLDBOXOFFICE

FROM BOXOFFICEMOJO

WHERE USBOXOFFICE > 2 \* (NONUSBOXOFFICE)

AND NONUSBOXOFFICE <> 0;

TITLE RELEASEYEAR USBOXOFFICE WORLDBOXOFFICE

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

Star Trek 2009 $257,730,019.00 $385,700,000.00

-- QUESTION 07

SET LINESIZE 1000

COLUMN TITLE FORMAT A25

SELECT TITLE, RELEASEYEAR

FROM BOXOFFICEMOJO

WHERE USBOXOFFICE > 3 \* (SELECT AVG(USBOXOFFICE) FROM BOXOFFICEMOJO WHERE USBOXOFFICE <> 0);

TITLE RELEASEYEAR

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

Avatar 2009

Titanic 1997

Jurassic World 2015

Marvel's The Avengers 2012

The Dark Knight 2008

-- QUESTION 08

COLUMN STANDARD\_DEVIATION FORMAT $999,999,999,999.00

COLUMN MEAN FORMAT $999,999,999,999.00

SELECT

STDDEV(NONUSBOXOFFICE) "STANDARD\_DEVIATION", AVG(NONUSBOXOFFICE) "MEAN"

FROM BOXOFFICEMOJO

WHERE NONUSBOXOFFICE <> 0;

STANDARD\_DEVIATION MEAN

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

$187,080,551.41 $260,312,216.40

-- QUESTION 09

SET LINESIZE 1000

COLUMN TITLE FORMAT A30

COLUMN RELEASEYEAR FORMAT A4

COLUMN NONUSBOXOFFICE FORMAT $999,999,999,999,99.00

SELECT TITLE, RELEASEYEAR AS YEAR, NONUSBOXOFFICE

FROM BOXOFFICEMOJO

WHERE NONUSBOXOFFICE IN

(SELECT MAX(NONUSBOXOFFICE)

FROM BOXOFFICEMOJO

WHERE RELEASEYEAR BETWEEN 2010 AND 2015

AND RELEASEYEAR NOT IN (2010,2012,2014));

TITLE YEAR NONUSBOXOFFICE

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

Furious 7 2015 $11,607,000,00.00

-- QUESTION 10

CREATE OR REPLACE FUNCTION FN\_PERCENTAGE

(

PARAM1 IN NUMBER

, PARAM2 IN NUMBER

) RETURN NUMBER AS

BEGIN

IF PARAM2 = 0

THEN RETURN 0;

ELSE RETURN (PARAM1/PARAM2)\*100;

END IF;

END FN\_PERCENTAGE;

/

Function FN\_PERCENTAGE compiled

-- QUESTION 11

CREATE TABLE VENDORINVOICES AS (SELECT \* FROM VENDORS NATURAL JOIN INVOICES);

/

Table VENDORINVOICES created.

-- QUESTION 12

ALTER TABLE VENDORINVOICES ADD AVG\_INVOICE\_AMT NUMBER(9,2);

UPDATE VENDORINVOICES V1 SET AVG\_INVOICE\_AMT = (SELECT AVG(INVOICE\_TOTAL) FROM VENDORINVOICES V2 WHERE V1.VENDOR\_ID = V2.VENDOR\_ID GROUP BY V2.VENDOR\_ID);

/

Table VENDORINVOICES altered.

114 rows updated.

-- QUESTION - 13

SET SERVEROUTPUT ON;

DECLARE

PERCENTAGE NUMBER;

CURSOR CURSOR\_VENDORINVOICES IS SELECT VENDOR\_NAME, INVOICE\_TOTAL,

AVG\_INVOICE\_AMT, INVOICE\_DUE\_DATE FROM VENDORINVOICES WHERE

INVOICE\_TOTAL > (2 \* AVG\_INVOICE\_AMT) ORDER BY VENDOR\_NAME;

BEGIN

FOR EACH\_ROW IN CURSOR\_VENDORINVOICES LOOP

PERCENTAGE := FN\_PERCENTAGE(EACH\_ROW.INVOICE\_TOTAL,

EACH\_ROW.AVG\_INVOICE\_AMT);

DBMS\_OUTPUT.PUT\_LINE('VENDOR\_NAME: ' || EACH\_ROW.VENDOR\_NAME ||

CHR(10) || 'INVOICE\_TOTAL: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.INVOICE\_TOTAL, '$999,999,999.99')) || CHR(10) ||

'PERCENTAGE: ' || '%' || TRIM(' ' FROM TO\_CHAR(PERCENTAGE,

'999,999,999.99')) || CHR(10) || 'AVERAGE\_AMOUNT: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.AVG\_INVOICE\_AMT, '$999,999,999.99')) || CHR(10) ||

'INVOICE\_DUE\_DATE: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.INVOICE\_DUE\_DATE, 'MONTH')) ||

TO\_CHAR(EACH\_ROW.INVOICE\_DUE\_DATE, ' DD, YYYY') || CHR(10) );

END LOOP;

END;

PL/SQL procedure successfully completed.

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $241.00

PERCENTAGE: %258.72

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: JUNE 02, 2014

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $739.20

PERCENTAGE: %793.56

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: MAY 17, 2014

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $400.00

PERCENTAGE: %429.41

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: JULY 01, 2014

VENDOR\_NAME: Roadway Package System, Inc

INVOICE\_TOTAL: $25.67

PERCENTAGE: %235.07

AVERAGE\_AMOUNT: $10.92

INVOICE\_DUE\_DATE: JUNE 14, 2014

VENDOR\_NAME: Zylka Design

INVOICE\_TOTAL: $1,962.13

PERCENTAGE: %226.17

AVERAGE\_AMOUNT: $867.53

INVOICE\_DUE\_DATE: JULY 10, 2014

-- QUESTION 14

SET SERVEROUTPUT ON;

DECLARE

PERCENTAGE NUMBER;

CURSOR CURSOR\_VENDORINVOICES IS SELECT VENDOR\_NAME, INVOICE\_TOTAL,

AVG\_INVOICE\_AMT, INVOICE\_DUE\_DATE FROM VENDORINVOICES WHERE

INVOICE\_TOTAL > (2 \* AVG\_INVOICE\_AMT)

AND VENDOR\_ID IN (SELECT VENDOR\_ID FROM VENDORINVOICES GROUP BY

VENDOR\_ID

HAVING COUNT (VENDOR\_ID) > 5)

ORDER BY VENDOR\_NAME;

BEGIN

FOR EACH\_ROW IN CURSOR\_VENDORINVOICES LOOP

PERCENTAGE := FN\_PERCENTAGE(EACH\_ROW.INVOICE\_TOTAL,

EACH\_ROW.AVG\_INVOICE\_AMT);

DBMS\_OUTPUT.PUT\_LINE('VENDOR\_NAME: ' || EACH\_ROW.VENDOR\_NAME ||

CHR(10) || 'INVOICE\_TOTAL: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.INVOICE\_TOTAL, '$999,999,999.99')) || CHR(10) ||

'PERCENTAGE: ' || '%' || TRIM(' ' FROM TO\_CHAR(PERCENTAGE,

'999,999,999.99')) || CHR(10) || 'AVERAGE\_AMOUNT: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.AVG\_INVOICE\_AMT, '$999,999,999.99')) || CHR(10) ||

'INVOICE\_DUE\_DATE: ' || TRIM(' ' FROM

TO\_CHAR(EACH\_ROW.INVOICE\_DUE\_DATE, 'MONTH')) ||

TO\_CHAR(EACH\_ROW.INVOICE\_DUE\_DATE, ' DD, YYYY') || CHR(10) );

END LOOP;

END;

PL/SQL procedure successfully completed.

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $241.00

PERCENTAGE: %258.72

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: JUNE 02, 2014

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $739.20

PERCENTAGE: %793.56

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: MAY 17, 2014

VENDOR\_NAME: Federal Express Corporation

INVOICE\_TOTAL: $400.00

PERCENTAGE: %429.41

AVERAGE\_AMOUNT: $93.15

INVOICE\_DUE\_DATE: JULY 01, 2014

VENDOR\_NAME: Zylka Design

INVOICE\_TOTAL: $1,962.13

PERCENTAGE: %226.17

AVERAGE\_AMOUNT: $867.53

INVOICE\_DUE\_DATE: JULY 10, 2014

-- QUESTION 15

COLUMN VENDOR\_NAME FORMAT A30

SELECT DISTINCT VENDOR\_NAME, VENDOR\_STATE FROM VENDORINVOICES

WHERE VENDOR\_ID IN (SELECT VENDOR\_ID FROM VENDORINVOICES WHERE VENDOR\_STATE NOT IN ('CA','MI')

GROUP BY VENDOR\_ID, TO\_CHAR(INVOICE\_DATE,'IW') HAVING COUNT(1) > 2 );

/

VENDOR\_NAME VENDOR\_STATE

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Federal Express Corporation TN

United Parcel Service NV

-- DROPPING ALL ADDED OBJECTS:

DROP TABLE VENDORINVOICES;

DROP FUNCTION PERCENTAGE;

/

Table VENDORINVOICES dropped.

Function FN\_PERCENTAGE dropped.

---- <http://www.techonthenet.com/sql_server/subqueries.php>

-- CONCAT(MYPERCENTAGE, '%')