

ICT3722

Assignment 4



September 5, 2022

64482790

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# Question 1

* 1. CREATE SEQUENCE invoices\_invoiceID\_seq

INCREMENT BY 1

START WITH 1

CACHE 20

NOCYCLE;

CREATE TABLE Invoices

(Invoice\_ID NUMBER(4) NOT NULL,

Vendor\_ID NUMBER(5) NOT NULL,

Invoice\_NUMBER VARCHAR(10),

Invoice\_Date DATE,

Invoice\_Total NUMBER(10,2),

Payment\_Total NUMBER(10,2),

Credit\_Total NUMBER(10,2),

Terms\_ID NUMBER(2) NOT NULL,

Invoice\_Due\_Date DATE,

Payment\_Date DATE,

CONSTRAINT Invoices\_InvoiceID\_PK PRIMARY KEY(Invoice\_ID),

CONSTRAINT Invoices\_invoicedate\_ck CHECK (Invoice\_Date < Invoice\_Due\_Date));

1.2 CREATE TABLE Vendors

(Vendor\_ID NUMBER(5) NOT NULL,

Name VARCHAR(30),

Location VARCHAR(15),

Cell VARCHAR(10),

Email VARCHAR(20),

CONSTRAINT Vendors\_VendorID\_PK PRIMARY KEY(Vendor\_ID));

1.3 INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

34,

'QP58872',

TO\_DATE('25-FEB-14', 'DD-MON-YY'),

116.54,

116.54,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

34,

'Q545443',

TO\_DATE('14-MAR-14', 'DD-MON-YY'),

1083.58,

1083.58,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

110,

'P-0608',

TO\_DATE('16-APR-14', 'DD-MON-YY'),

20551.13,

0,

1200,

5,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

110,

'P-0259',

TO\_DATE('16-APR-14', 'DD-MON-YY'),

26881.4,

26881.4,

0,

3,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

122,

'MAB01489',

TO\_DATE('16-APR-14', 'DD-MON-YY'),

936.93,

936.93,

0,

3,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-497',

TO\_DATE('17-APR-14', 'DD-MON-YY'),

2312.2,

0,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

82,

'C73-24',

TO\_DATE('17-APR-14', 'DD-MON-YY'),

600,

600,

0,

2,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-487',

TO\_DATE('18-APR-14', 'DD-MON-YY'),

1927.54,

0,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-477',

TO\_DATE('19-APR-14', 'DD-MON-YY'),

2184.11,

0,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-467',

TO\_DATE('24-APR-14', 'DD-MON-YY'),

2318.03,

2318.03,

0,

4,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-457',

TO\_DATE('24-APR-14', 'DD-MON-YY'),

3813.33,

3813.33,

0,

3,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-447',

TO\_DATE('24-APR-14', 'DD-MON-YY'),

3689.99,

3689.99,

0,

3,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-437',

TO\_DATE('24-APR-14', 'DD-MON-YY'),

2765.36,

2765.36,

0,

2,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'989319-427',

TO\_DATE('25-APR-14', 'DD-MON-YY'),

2115.81,

2115.81,

0,

1,

NULL,

NULL);

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL,

112,

'97/553B',

TO\_DATE('26-APR-14', 'DD-MON-YY'),

313.55,

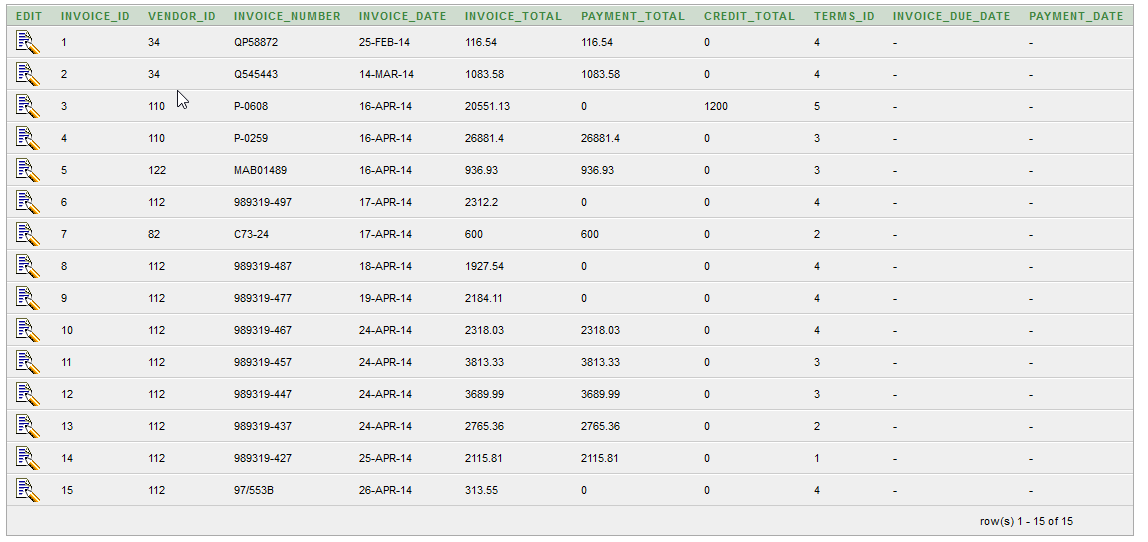
0,

0,

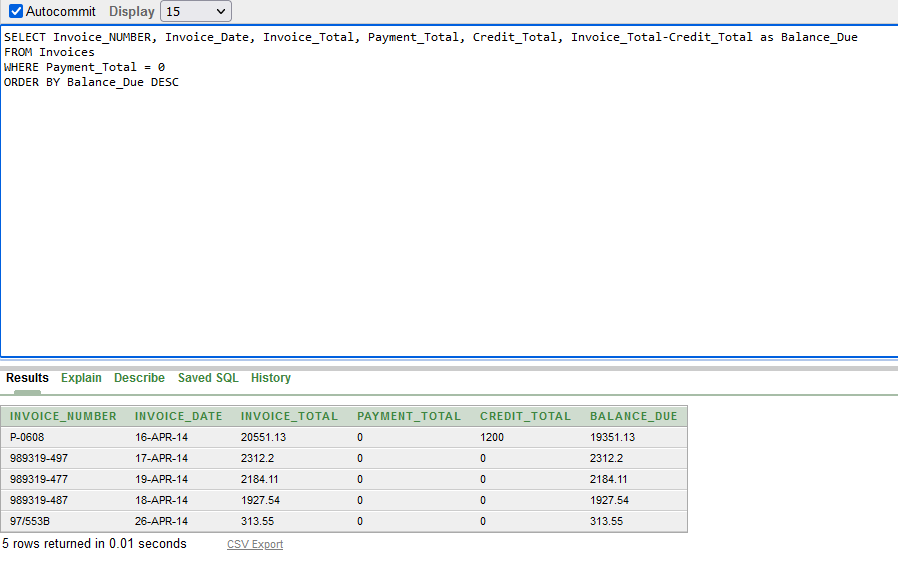
4,

NULL,

NULL);



# Question 2

2.1 

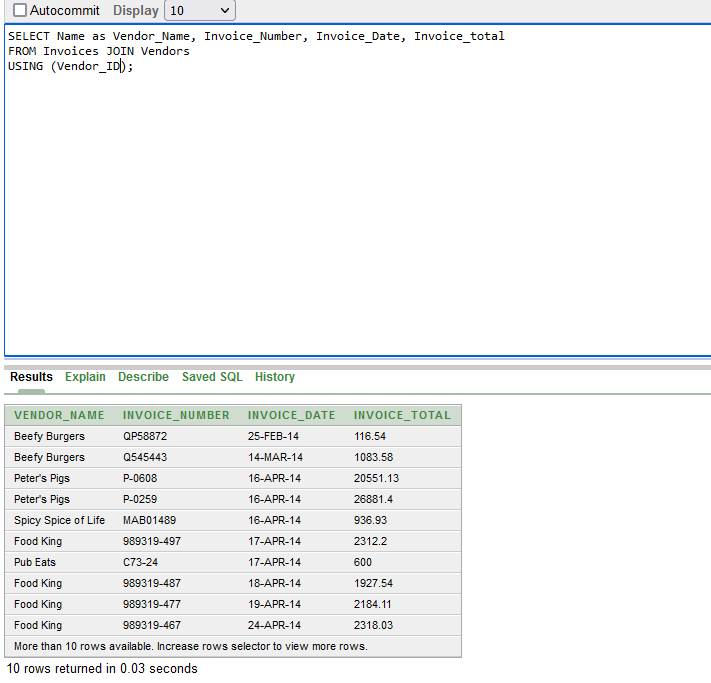
SELECT Invoice\_NUMBER, Invoice\_Date, Invoice\_Total, Payment\_Total, Credit\_Total, Invoice\_Total-Credit\_Total as Balance\_Due

FROM Invoices

WHERE Payment\_Total = 0

ORDER BY Balance\_Due DESC

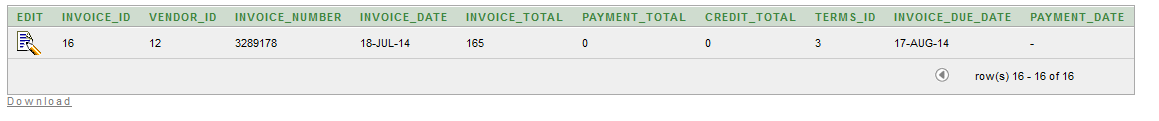
# Question 3



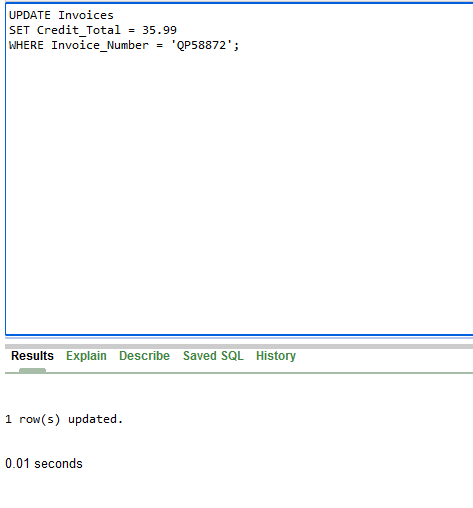
# Question 4

INSERT INTO Invoices

VALUES (invoices\_invoiceID\_seq.NEXTVAL, 12, '3289178', TO\_DATE('18-JUL-14', 'DD-MON-YY'), 165, 0, 0, 3, TO\_DATE('17-AUG-14', 'DD-MON-YY'), NULL);

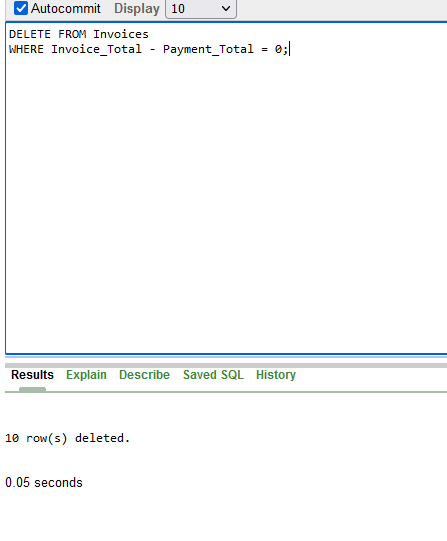


# Question 5





# Question 6



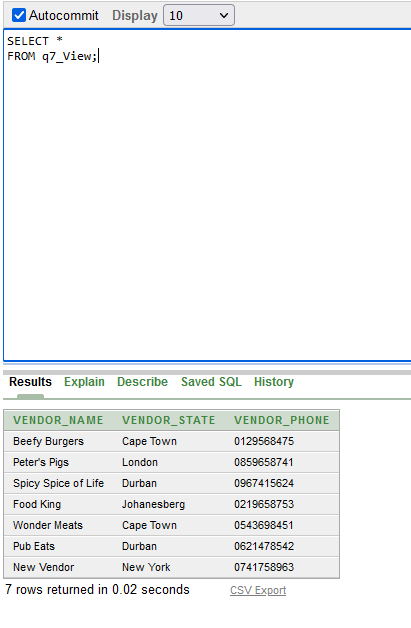
A picture containing scatter chart

Description automatically generated

# Question 7

Graphical user interface, text, application

Description automatically generated



# Question 8

A picture containing text

Description automatically generated

CREATE TABLE Avg\_Invoice\_Total

AS (SELECT Vendor\_ID, AVG(Invoice\_Total) AS Average FROM Invoices GROUP BY Vendor\_ID);

SELECT Vendor\_ID, Invoice\_Total, ROUND(Average,2)

FROM Invoices JOIN Avg\_Invoice\_Total

Using (Vendor\_ID);