

Student Name

Student ID

New Zealand Diploma in Information Technology Technical Support (Level 5)

New Zealand Diploma in Web Development and Design (Level 5)

Database Design

DTEC502

Practical Assessment – SQL Test

Semester 1 2021

Date: Friday, 11th June 2021

Time: 8.00am – 10.00am

Time Allowed: 2 hours 00 minutes

Students are encouraged to read through the exam in the first ten (10) minutes and ask any questions.

Instructions:

Answer **ALL** questions.

This is an **OPEN** resources test.

Students are allowed to use their **OWN** resources.

All required files located on the DTEC502 Moodle site under the “FINAL SQL Practical Tests” tab.

TOTAL MARKS: 50

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This test worth **25%** of the total marks for this course.

This assignment has eight (8) pages including the cover sheet.

1. Open and execute the script file **ClientOrders.sql**.
(Mark 1)
2. List only those clients that live in Dunedin.
(Mark 1)
3. List the clients whose last name begins with the letter J.
(Marks 1)
4. Which clients have a balance between \$50 and \$150?
(Marks 1)
5. What city does our client Mary Nelson live in?
(Marks 2)
6. Which clients have a balance below \$200 and live in Dunedin?
(Marks 2)
7. What is the difference between the clients limit and their current balance for each client? (Hint: calculate the limit field minus the balance field). Name the field you create NewBalance.
(Marks 3)
8. What is the total price for each line of the order? (Hint: multiply the quantity by the quotedprice) Name the new field LineTotal.
(Marks 2)
9. Which client orders (Custorder) were place after 1/6/99?
(Marks 2)
10. How many clients live in each city where the number of clients is more than 3?
(Marks 3)
11. What is the total balance for each sales rep?
(Marks 2)
12. What is the maximum balance for each city?
(Marks 2)
13. List all of our clients and their client representatives (repref). Display the client name as one field, and the rep name as one field.
(Marks 3)
14. List the first and last name of the clients next to their customer order (custorder) and include the date of the customers order.
(Marks 2)
15. What are the descriptions and amount on hand of the parts that appear on orderline 1007. Show only the records for 1007 in your answer?
(Marks 2)

16. List the description of the parts and their quoted price and quantity on each orderline. Sort by description.
(Marks 3)
17. List the description of the parts and their quoted price and quantity on each orderline. Only display the records that have a quoted price over 200.
(Marks 3)
18. List all orders (order ref, order date), the client name for those orders, and all part descriptions and unit prices.
(Marks 3)
19. List all orders (order ref, order date), the client name for those orders, and all part descriptions and unit prices. Display only the records where the order date is after 10/6/99.
(Marks 3)
20. List all orders (order ref, order date), the client name for those orders, the rep's name, and all part descriptions.
(Marks 3)
21. What is the total balance for each sales rep. Display the rep name as one field.
(Marks 3)
22. Using the answer from Question 8, now display the total linetotal (sum of linetotal) for each Order (orderref).
(Marks 3)

Required Outputs:**Q2.**

	firstname	lastname	city
1	Sally	Adams	Dunedin
2	Jo	Baker	Dunedin
3	Judy	Roberts	Dunedin
4	Dan	Martin	Dunedin
5	Peter	Paulls	Dunedin
6	Margaret	Jones	Dunedin
7	Peter	Yu	Dunedin

Q3.

	firstname	lastname
1	Margaret	Jones
2	Greg	Johnson

Q4.

	firstname	lastname	balance
1	Judy	Roberts	57.75
2	Peter	Paulls	100.56
3	Margaret	Jones	114.56

Q5.

	firstname	lastname	city
1	Mary	Nelson	Christchurch

Q6.

	firstname	lastname	balance	city
1	Judy	Roberts	57.75	Dunedin
2	Peter	Paulls	100.56	Dunedin
3	Margaret	Jones	114.56	Dunedin
4	Peter	Yu	10.00	Dunedin

Q7.

	custref	creditlimit	balance	NewBalance
1	124	500	418.75	81.25
2	256	800	10.75	789.25
3	311	300	200.10	99.90
4	315	300	320.75	-20.75
5	405	800	201.75	598.25
6	412	1000	908.75	91.25
7	522	800	49.50	750.50
8	567	300	201.20	98.80
9	587	500	57.75	442.25
10	622	500	575.50	-75.50
11	635	500	100.56	399.44
12	640	800	114.56	685.44
13	649	500	200.00	300.00
14	675	300	15.00	285.00
15	680	500	10.00	490.00

Q8.

	orderef	partref	quantity	quotedprice	LineTotal
1	1003	2	5	399.00	1995.00
2	1003	3	4	320.00	1280.00
3	1004	2	2	402.99	805.98
4	1005	1	20	17.50	350.00
5	1005	4	5	187.50	937.50
6	1005	6	3	24.95	74.85
7	1006	2	1	402.99	402.99
8	1007	4	1	199.00	199.00
9	1007	6	35	24.95	873.25

Q9.

	orderef	orderdate
1	1005	1999-06-06
2	1006	1999-06-12
3	1007	1999-06-13

Q10.

	city	Number in each city
1	Christchurch	5
2	Dunedin	7

Q11.

	repref	Total balance
1	3	1205.32
2	6	1767.10
3	11	412.50

Q12.

	city	Maximum balance
1	Christchurch	320.75
2	Dunedin	575.50
3	Palmerston	908.75

Q13.

	Client name	Rep Name
1	Sally Adams	Mary Jones
2	Ann Samuals	Sam Brown
3	Don Charles	William Smith
4	Tom Daniels	Mary Jones
5	Al Williams	Sam Brown
6	Sandra Adams	William Smith
7	Mary Nelson	Mary Jones
8	Jo Baker	Mary Jones
9	Judy Roberts	William Smith
10	Dan Martin	William Smith
11	Peter Paulls	Mary Jones
12	Margaret Jones	Mary Jones
13	Robert McKenzie	Sam Brown
14	Greg Johnson	William Smith
15	Peter Yu	William Smith

Q14.

	orderref	firstname	lastname	orderdate
1	1003	Sally	Adams	1999-05-18
2	1004	Ann	Samuals	1999-05-18
3	1005	Sally	Adams	1999-06-06
4	1006	Mary	Nelson	1999-06-12
5	1007	Judy	Roberts	1999-06-13

Q15.

	orderref	description	onhand
1	1007	Bike	35
2	1007	Skates	302

Q16.

	orderid	description	quotedprice	quantity
1	1005	Bike	187.50	5
2	1007	Bike	199.00	1
3	1005	Iron	17.50	20
4	1005	Skates	24.95	3
5	1007	Skates	24.95	35
6	1003	Stove	399.00	5
7	1004	Stove	402.99	2
8	1006	Stove	402.99	1
9	1003	Washer	320.00	4

Q17.

	orderid	description	quotedprice	quantity
1	1003	Stove	399.00	5
2	1003	Washer	320.00	4
3	1004	Stove	402.99	2
4	1006	Stove	402.99	1

Q18.

	orderid	orderdate	firstname	lastname	description	unitprice
1	1003	1999-05-18	Sally	Adams	Stove	402.99
2	1003	1999-05-18	Sally	Adams	Washer	311.95
3	1004	1999-05-18	Ann	Samuals	Stove	402.99
4	1005	1999-06-06	Sally	Adams	Iron	17.95
5	1005	1999-06-06	Sally	Adams	Bike	187.50
6	1005	1999-06-06	Sally	Adams	Skates	24.95
7	1006	1999-06-12	Mary	Nelson	Stove	402.99
8	1007	1999-06-13	Judy	Roberts	Bike	187.50
9	1007	1999-06-13	Judy	Roberts	Skates	24.95

Q19.

	orderid	orderdate	firstname	lastname	description	unitprice
1	1006	1999-06-12	Mary	Nelson	Stove	402.99
2	1007	1999-06-13	Judy	Roberts	Bike	187.50
3	1007	1999-06-13	Judy	Roberts	Skates	24.95

Q20.

	orderref	orderdate	firstname	lastname	repfirstname	replastname	description
1	1003	1999-05-18	Sally	Adams	Mary	Jones	Stove
2	1003	1999-05-18	Sally	Adams	Mary	Jones	Washer
3	1004	1999-05-18	Ann	Samuals	Sam	Brown	Stove
4	1005	1999-06-06	Sally	Adams	Mary	Jones	Iron
5	1005	1999-06-06	Sally	Adams	Mary	Jones	Bike
6	1005	1999-06-06	Sally	Adams	Mary	Jones	Skates
7	1006	1999-06-12	Mary	Nelson	Mary	Jones	Stove
8	1007	1999-06-13	Judy	Roberts	William	Smith	Bike
9	1007	1999-06-13	Judy	Roberts	William	Smith	Skates

Q21.

	Rep Name	Total Balance
1	Sam Brown	412.50
2	Mary Jones	1205.32
3	William Smith	1767.10

Q22.

	orderref	Total Linetotal
1	1003	3275.00
2	1004	805.98
3	1005	1362.35
4	1006	402.99
5	1007	1072.25