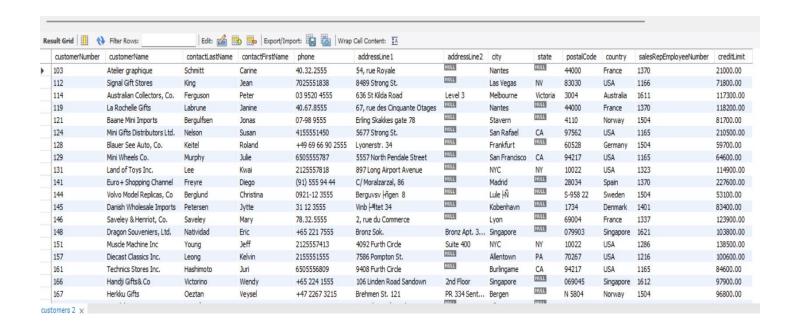
QNO: 1

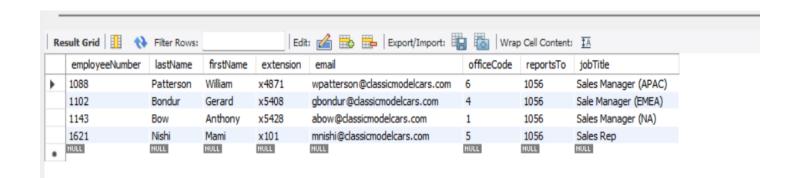
select * from customers where creditLimit>20000;



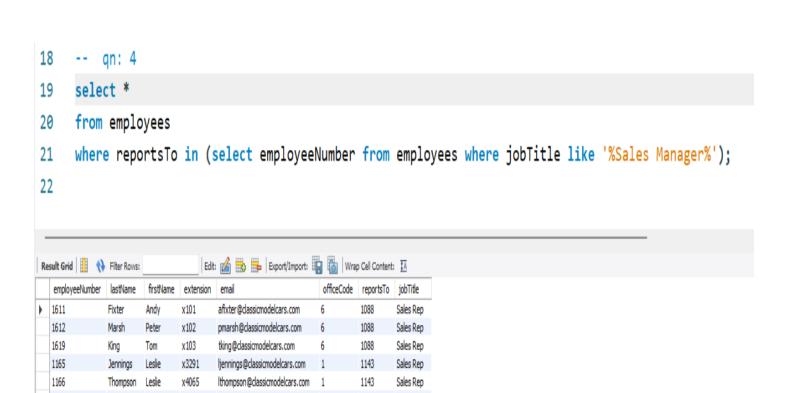
QNO: 2

10

6 -- QNO 2
7 • select *
8 from employees
9 where reportsTo in (select employeeNumber from employees where jobTitle='VP Sales');



```
12
        -- Qno: 3
      select *
13 •
14
         from customers
         where (state is not null) and (country='USA') and (creditLimit between 100000 and 200000);
15
16
17
18
Result Grid # Filter Rows:
                                        Edit: 🔏 🖶 Export/Import: 📳 👸 Wrap Cell Content: 🟗
   customerNumber customerName
                                       contactLastName contactFirstName phone
                                                                                                    addressLine2 city
                                                                               addressLine 1
                                                                                                                           state postalCode country salesRepEmployeeNumber
                                                                                                                                                                        creditLimit
                                                                                                   NULL
                                                                    2125557818 897 Long Airport Avenue
                                                                                                               NYC
                                                                                                                                                                        114900.00
  131
                 Land of Toys Inc.
                                                     Kwai
                                                                                                                           NY
                                                                                                                                 10022
                                                                                                                                           LISA
                                                                                                                                                   1323
   151
                                      Young
                                                     Jeff
                                                                    2125557413 4092 Furth Circle
                                                                                                   Suite 400
                                                                                                              NYC
                                                                                                                           NY
                                                                                                                                 10022
                                                                                                                                           USA
                                                                                                                                                   1286
                                                                                                                                                                        138500.00
                 Musde Machine Inc
                                                                                                               Allentown
                 Diecast Classics Inc.
                                                     Kelvin
                                                                    2155551555 7586 Pompton St.
                                                                                                                                 70267
                                                                                                                                                                        100600.00
                                       Leong
                                                                                                   NULL
  239
                Collectable Mini Designs Co. Thompson
                                                     Valarie
                                                                    7605558146 361 Furth Circle
                                                                                                               San Diego
                                                                                                                           CA
                                                                                                                                 91217
                                                                                                                                           USA
                                                                                                                                                   1166
                                                                                                                                                                        105000.00
                                                                                                   NULL
  286
                 Marta's Replicas Co.
                                       Hernandez
                                                     Marta
                                                                    6175558555 39323 Spinnaker Dr.
                                                                                                               Cambridge
                                                                                                                                 51247
                                                                                                                                                   1216
                                                                                                                                                                        123700.00
                                                                    9145554562 3758 North Pendale Street
                                                                                                                                                                        102700.00
                                                     Steve
                                                                                                   NULL
                                                                    6505551386 7734 Strong St.
  321
                 Corporate Gift Ideas Co.
                                      Brown
                                                     Julie
                                                                                                               San Francisco CA
                                                                                                                                 94217
                                                                                                                                           USA
                                                                                                                                                   1165
                                                                                                                                                                        105000.00
                                                                    6035558647 2304 Long Airport Avenue
                Online Diecast Creations Co. Young
   363
                                                     Dorothy
                                                                                                               Nashua
                                                                                                                           NH
                                                                                                                                 62005
                                                                                                                                           USA
                                                                                                                                                   1216
                                                                                                                                                                        114200.00
```



1143

1143

1143

1143

3

Sales Rep

Sales Rep

Sales Rep

Sales Rep

jfirrelli@classicmodelcars.com

ftseng@classicmodelcars.com

gvanauf@dassicmodelcars.com

spatterson@classicmodelcars.com 2

x2173

x4334

x2248

x4102

1188

1216

1286

1323

NULL

Firrelli

Vanauf

Patterson

Steve

Foon Yue

George

```
QNO: 5
23
24 • select country, avg(creditLimit) as average_creditLimit
       from customers
25
       group by country
26
27
28
Export: Wrap Cell Content: IA
   country
           average_creditLimit
  France
           77691.666667
          78102.777778
  Australia
          86060.000000
          81700.000000
  Norway
  Poland
          0.000000
  Germany 19776.923077
          73971.428571
  Spain
          84750.000000
  Sweden
  Denmark
          102100.000000
  Singapore 67233.333333
          95950.000000
  Norway
          0.000000
  Portugal
          87800.000000
  Japan
  Finland
          95266.666667
          88740.000000
  Ireland
          34700.000000
  Canada
          76200.000000
  Hong Kong 58600.000000
          97200.000000
  Switzerland 47100.000000
   -- QNO: 6
30
31 • SELECT orderDate, customerNumber, COUNT(*) AS totalOrders
    FROM Orders
32
   GROUP BY orderDate, customerNumber
33
      HAVING totalOrders> 10;
                              Export: Wrap Cell Content: $\frac{1}{2}
orderDate customerNumber totalOrders
```

```
-- QNO: 7
37
38 • SELECT
           employeeNumber,
39
           CONCAT(firstName, ' ', lastName) AS supervisorName,
40
           jobTitle,
41
            (SELECT COUNT(*) FROM employees e WHERE e.reportsTo = emp.employeeNumber) AS totalSupervisees
42
43
      FROM employees emp
      WHERE employeeNumber IN (SELECT DISTINCT reportsTo FROM employees);
44
15
Result Grid  Filter Rows:
                               Export: Wrap Cell Content: IA
  employeeNumber supervisorName jobTitle
                                      totalSupervisees
                       President
             Diane Murphy
            Mary Patterson
                       VP Sales
  1056
             William Patterson Sales Manager (APAC) 3
  1102
            Gerard Bondur Sale Manager (EMEA) 6
  1143
            Anthony Bow
                       Sales Manager (NA)
  1621
            Mami Nishi
                       Sales Rep
                                                                  SS
46
       -- QNO: 8
47 • select
```

```
emp.employeeNumber,
48
           CONCAT(emp.firstName, ' ', emp.lastName) AS supervisorName,
49
            emp.jobTitle,
50
51
            sup.totalSupervisees
      from employees emp
52
53
      join
            (select reportsTo as employeeNumber, count(*) as totalSupervisees from employees
54
            group by reportsTo
55
            ) sup
56
      on emp.employeeNumber= sup.employeeNumber;
57
Export: Wrap Cell Content: IA
  employeeNumber supervisorName
                       jobTitle
                                     totalSupervisees
            Diane Murphy
  1002
                       President
  1056
             Mary Patterson
                       VP Sales
  1088
             William Patterson Sales Manager (APAC) 3
  1102
            Gerard Bondur
                       Sale Manager (EMEA) 6
  1143
             Anthony Bow
                       Sales Manager (NA)
  1621
             Mami Nishi
                       Sales Rep
```

```
-- QNO: 9
60
         with avg_salary as (
61 •
                 select avg(creditLimit) as avgLimit
63
                 from customers
64
          select *
65
         from customers c , avg_salary av
66
          where c.creditLimit>av.avgLimit;
67
Result Grid | Filter Rows:
                                        Export: Wrap Cell Content: IA
   customerNumber customerName
                                         contactLastName contactFirstName phone
                                                                                                                                     city
                                                                                                                                                         postalCode country
                                                                                                                                                                              salesRepEmployeeNumber creditLimit
                                                                                                                HULL
                  Signal Gift Stores
                                                                        7025551838
                                                                                      8489 Strong St.
                                                                                                                                     Las Vegas
                                                                                                                                                        83030
                                                                                                                                                                                                     71800.00
                                                                                                                                                                                                               67659.016393
   114
                  Australian Collectors, Co.
                                                                        03 9520 4555 636 St Kilda Road
                                                                                                                                     Melbourne
                                                                                                                                                                                                    117300.00 67659.016393
                                        Ferguson
                                                        Peter
                                                                                                                Level 3
                                                                                                                                                Victoria
                                                                                                                                                        3004
                                                                                                                                                                   Australia
                                                                                                                                                                              1611
   119
                  La Rochelle Gifts
                                        Labrune
                                                        Janine
                                                                        40.67.8555
                                                                                      67, rue des Cinquante Otages
                                                                                                                                     Nantes
                                                                                                                                                         44000
                                                                                                                                                                   France
                                                                                                                                                                              1370
                                                                                                                                                                                                    118200.00 67659.016393
                                                                                                               NULL
                                                                                                                                                NULL
   121
                  Baane Mini Imports
                                        Bergulfsen
                                                        Jonas
                                                                        07-98 9555
                                                                                      Erling Skakkes gate 78
                                                                                                                                     Stavern
                                                                                                                                                        4110
                                                                                                                                                                   Norway
                                                                                                                                                                              1504
                                                                                                                                                                                                    81700.00
                                                                                                                                                                                                               67659.016393
                                                                                                               NULL
                                                                                                                                                CA
   124
                  Mini Gifts Distributors Ltd.
                                        Nelson
                                                        Susan
                                                                        4155551450
                                                                                      5677 Strong St.
                                                                                                                                     San Rafael
                                                                                                                                                        97562
                                                                                                                                                                              1165
                                                                                                                                                                                                    210500.00
                                                                                                                                                                                                               67659.016393
                                                                                                               HULL
                                                                                                                                                                                                    114900.00 67659.016393
   131
                  Land of Toys Inc.
                                        Lee
                                                        Kwai
                                                                        2125557818
                                                                                      897 Long Airport Avenue
                                                                                                                                     NYC
                                                                                                                                                         10022
                                                                                                               NULL
                  Euro + Shopping Channel
                                                                        (91) 555 94 44 C/ Moralzarzal, 86
                                                                                                                                     Madrid
                                                                                                                                                                              1370
                                                                                                                                                                                                    227600.00 67659.016393
   141
                                        Freyre
                                                        Diego
                                                                                                                                                        28034
                                                                                                                                                                   Spain
   145
                  Danish Wholesale Imports
                                                                        31 12 3555
                                                                                      Vinb |- let 34
                                                                                                                                     Kobenhavn
                                                                                                                                                        1734
                                                                                                                                                                              1401
                                                                                                                                                                                                    83400.00
                                                                                                                                                                                                               67659.016393
                                                                                                               NULL
                                                                                                                                                NULL
   146
                  Saveley & Henriot, Co.
                                                                                      2, rue du Commerce
                                                                                                                                                                              1337
                                                                                                                                                                                                    123900.00 67659.016393
                                        Saveley
                                                        Mary
                                                                        78.32.5555
                                                                                                                                     Lyon
                                                                                                                                                        69004
                                                                                                                                                                   France
                                                                                                                                     Singapore
                                                                                                                                                                   Singapore
   148
                  Dragon Souveniers, Ltd.
                                                                        +65 221 7555 Bronz Sok.
                                                                                                                Bronz Apt. 3/6 Tesvikiye
                                                                                                                                                        079903
                                                                                                                                                                              1621
                                                                                                                                                                                                     103800.00 67659.016393
   151
                                                         Jeff
                                                                        2125557413
                                                                                                                                                                              1286
                                                                                                                                                                                                    138500.00 67659.016393
                  Muscle Machine Inc
                                                                                      4092 Furth Circle
                                                                                                                Suite 400
                                                                                                                                     NYC
                                                                                                                                                NY
                                                                                                                                                         10022
                                                                                                                                                                   USA
                                         Young
```

HULL

2nd Floor

PR 334 Sentrum

Allentown PA

Burlingame

Singapore

Bergen

Lille

70267

94217

069045

N 5804

59000

USA

USA

Singapore

Norway

France

1216

1165

1612

1370

100600.00 67659.016393

97900.00 67659.016393

82900.00 67659.016393

67659.016393

67659.016393

84600.00

96800.00

157

161

166

167

171

Result 6 x

Diecast Classics Inc.

Technics Stores Inc.

Daedalus Designs Imports Ranc - R

Handji Gifts& Co

Herkku Gifts

Leong

Hashimoto

Victorino

Oeztan

Kelvin

Wendy

Vevsel

Martine

Juri

2155551555

6505556809

20.16.1555

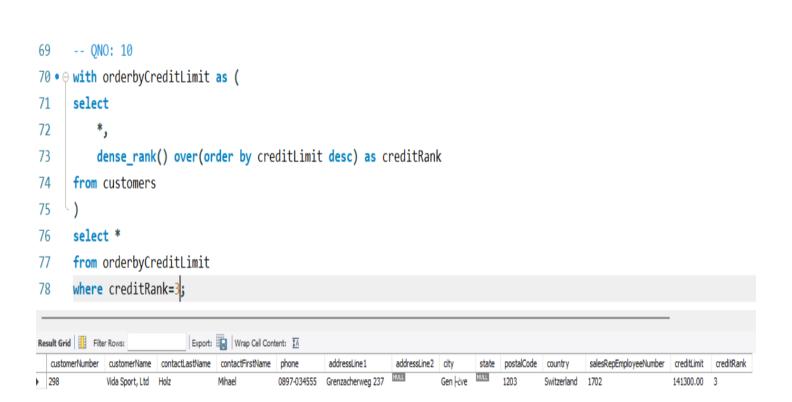
7586 Pompton St.

9408 Furth Circle

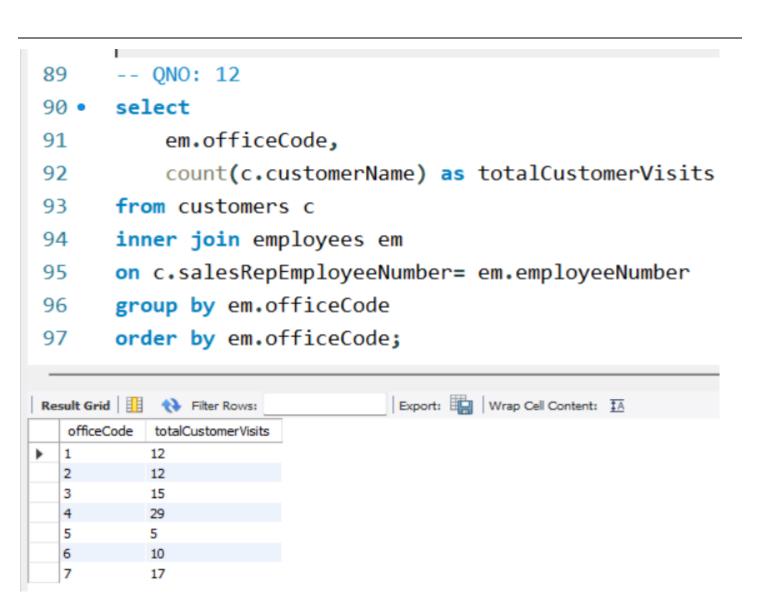
184, chauss l-Re de Tournai

+65 224 1555 106 Linden Road Sandown

+47 2267 3215 Brehmen St. 121



```
81
          ONO: 11
      select
82 •
          officeCode,
83
          count(employeeNumber) as totalEmployeesCount
84
      from employees
85
      group by officeCode;
86
Export: Wrap Cell Content: IA
  officeCode totalEmployeesCount
         2
  2
         5
```



```
QNO: 13
100
       SELECT
101 •
            em.officeCode,
102
            ofc.state,
103
           ofc.country,
104
            SUM(py.amount) AS totalPayment
105
       FROM customers cu
106
       LEFT JOIN employees em ON em.employeeNumber = cu.salesRepEmployeeNumber
107
       LEFT JOIN payments py ON cu.customerNumber = py.customerNumber
108
       LEFT JOIN offices ofc ON em.officeCode = ofc.officeCode
109
       WHERE em. officeCode IS NOT NULL -- Excludes rows where officeCode is null
110
       GROUP BY em.officeCode, ofc.state, ofc.country
111
       ORDER BY em.officeCode;
112
                                 Export: Wrap Cell Content: TA
officeCode
          state
                          totalPayment
                   country
          CA
  1
                   USA
                         1337439.58
   2
          MA
                  USA
                         835882.33
   3
          NY
                   USA
                         1072619.47
          HULL
   4
                  France
                         2819168.90
   5
          Chiyoda-Ku
                  Japan
                         457110.07
   6
          NULL
                   Australia 1007292.98
          NULL
   7
                  UK
                         1324325.90
```

```
114
       -- ONO: 14
115 •
      SELECT
           ofc.officeCode,
116
           ofc.state,
117
           ofc.country,
118
           SUM(od.priceEach * od.quantityOrdered) AS totalSales
119
       FROM customers cu
120
       JOIN employees em ON cu.salesRepEmployeeNumber = em.employeeNumber
121
       JOIN offices ofc ON em.officeCode = ofc.officeCode
122
123
       JOIN orders ord ON ord.customerNumber = cu.customerNumber
       JOIN orderdetails od ON od.orderNumber = ord.orderNumber
124
       GROUP BY ofc.officeCode, ofc.state, ofc.country
125
       ORDER BY ofc.officeCode;
126
                               Export: Wrap Cell Content: TA
 officeCode
                        totalSales
          state
                  country
          CA
                  USA
                        1429063.57
  2
          MA
                  USA
                        892538.62
  3
          NY
                  USA
                        1157589.72
```

NULL

NULL

7

Chiyoda-Ku

France

Japan

UK

Australia

3083761.58

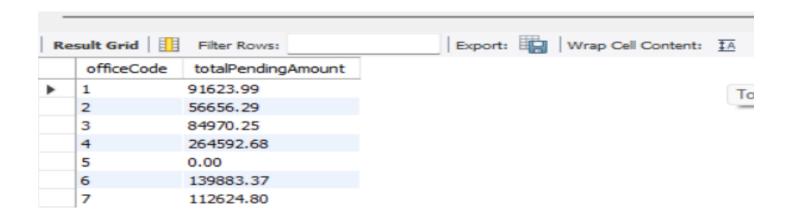
457110.07

1147176.35

1436950.70

```
129
        -- ONO: 15
130 ● ⊖ with officeTotalPayment as (
131
            SELECT
132
            em.officeCode,
            SUM(py.amount) AS totalPayment
133
134
            FROM customers cu
            JOIN employees em ON em.employeeNumber = cu.salesRepEmployeeNumber
135
            JOIN payments py ON cu.customerNumber = py.customerNumber
136
            JOIN offices ofc ON em.officeCode = ofc.officeCode
137
            GROUP BY em.officeCode, ofc.state, ofc.country),
138
139

⊖ officeTotalSales as (
140
            SELECT
            ofc.officeCode,
141
            SUM(od.priceEach * od.quantityOrdered) AS totalSales
142
143
            FROM customers cu
144
            JOIN employees em ON cu.salesRepEmployeeNumber = em.employeeNumber
            JOIN offices ofc ON em.officeCode = ofc.officeCode
145
            JOIN orders ord ON ord.customerNumber = cu.customerNumber
146
            JOIN orderdetails od ON od.orderNumber = ord.orderNumber
147
            GROUP BY ofc.officeCode, ofc.state, ofc.country
148
149
        select
150
            op.officeCode,
151
152
             (os.totalSales-op.totalPayment) as totalPendingAmount
        from officeTotalPayment op
153
        join officeTotalSales os
154
        on op.officeCode=os.officeCode
155
156
        order by op.officeCode;
```



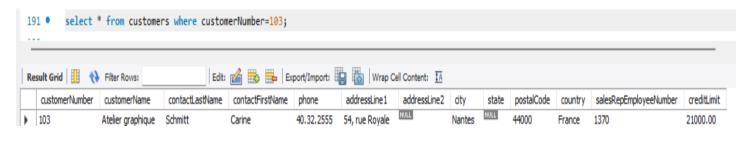
```
158
          -- ONO: 16
159 •
          SELECT
               customerNumber,
160
161
               customerName,
162
               country,
163
               creditLimit,
164
               SUM(creditLimit) OVER (PARTITION BY country) as countryTotalCreditLimit,
               round((creditLimit / SUM(creditLimit) OVER (PARTITION BY country)), 4) AS creditLimitProportion
165
          FROM
166
167
               customers
168
          order by country;
160
                                                  Export: Wrap Cell Content: IA
Result Grid
                Filter Rows:
   customerNumber
                    customerName
                                                                          countryTotalCreditLimit
                                                                                                 creditLimitProportion
                                                   country
                                                              creditLimit
                                                   Australia
                    Australian Collectors, Co.
                                                             117300.00
                                                                         430300.00
                                                                                                0.2726
  114
                    Australian Collectables, Ltd
                                                   Australia
                                                             60300.00
                                                                         430300.00
   471
                                                                                                0.1401
   333
                    Australian Gift Network, Co
                                                   Australia
                                                             51600.00
                                                                          430300.00
                                                                                                0.1199
                    Anna's Decorations, Ltd
                                                   Australia
   276
                                                             107800.00
                                                                         430300.00
                                                                                                0.2505
                    Souveniers And Things Co.
                                                   Australia
   282
                                                             93300.00
                                                                          430300.00
                                                                                                0.2168
                    Mini Auto Werke
   452
                                                   Austria
                                                             45300.00
                                                                         117000.00
                                                                                                0.3872
   382
                    Salzburg Collectables
                                                   Austria
                                                             71700.00
                                                                          117000.00
                                                                                                0.6128
                                                             79900.00
   314
                    Petit Auto
                                                   Belgium
                                                                          103400.00
                                                                                                0.7727
   381
                    Royale Belge
                                                   Belgium
                                                             23500.00
                                                                          103400.00
                                                                                                0.2273
                    Canadian Gift Exchange Network
   202
                                                   Canada
                                                             90300.00
                                                                         228600.00
                                                                                                0.3950
   233
                    Qu - Bbec Home Shopping Netw...
                                                   Canada
                                                             48700.00
                                                                          228600.00
                                                                                                0.2130
   260
                    Royal Canadian Collectables, Ltd.
                                                   Canada
                                                             89600.00
                                                                         228600.00
                                                                                                0.3920
   145
                    Danish Wholesale Imports
                                                             83400.00
                                                                          204200.00
                                                                                                0.4084
                                                   Denmark
   227
                    Heintze Collectables
                                                             120800.00
                                                                         204200.00
                                                                                                0.5916
                                                   Denmark
                    Toys of Finland, Co.
                                                   Finland
                                                             96500.00
                                                                          285800.00
   186
                                                                                                0.3376
   334
                    Suominen Souveniers
                                                   Finland
                                                             98800.00
                                                                          285800.00
                                                                                                0.3457
  311
                    Oulu Tov Supplies, Inc.
                                                   Finland
                                                             90500.00
                                                                          285800.00
                                                                                                0.3167
```

ONO: 17

```
170
          -- ONO: 17
171 •
          CREATE VIEW CustomerOrders AS
172
          SELECT
173
               cu.customerName,
               CONCAT_MS(', ', cu.addressLine1, cu.addressLine2, cu.city, cu.state, cu.postalCode, cu.country) AS completeAddress,
174
               COUNT(od.orderNumber) AS totalOrders
175
176
          FROM customers cu
          LEFT JOIN orders od ON od.customerNumber = cu.customerNumber
177
          GROUP BY cu.customerNumber, cu.customerName, completeAddress;
178
179
          select * from CustomerOrders order by totalOrders desc;
180 •
181
                                                 Export: Wrap Cell Content: TA
completeAddress
   customerName
                                                                          totalOrders
                              C/ Moralzarzal, 86, Madrid, 28034, Spain
  Euro + Shopping Channel
                                                                         26
   Mini Gifts Distributors Ltd.
                              5677 Strong St., San Rafael, CA, 97562, USA
                                                                         17
   Australian Collectors, Co.
                              636 St Kilda Road, Level 3, Melbourne, Victoria,... 5
   Danish Wholesale Imports
                              Vinb |- Itet 34, Kobenhavn, 1734, Denmark
   Dragon Souveniers, Ltd.
                              Bronz Sok., Bronz Apt. 3/6 Tesvikiye, Singapore... 5
   Down Under Souveniers, Inc 162-164 Grafton Road, Level 2, Audkland , Ne... 5
   Reims Collectables
                              59 rue de l'Abbaye, Reims, 51100, France
   La Rochelle Gifts
                              67, rue des Cinquante Otages, Nantes, 44000, ... 4
   Baane Mini Imports
                              Erling Skakkes gate 78, Stavern, 4110, Norway
   Blauer See Auto, Co.
                              Lyonerstr. 34, Frankfurt, 60528, Germany
   Land of Toys Inc.
                              897 Long Airport Avenue, NYC, NY, 10022, USA
   Volvo Model Replicas, Co
                              Berguvsv Higen 8, Lule HN, S-958 22, Sweden
   Musde Machine Inc.
                              4092 Furth Circle, Suite 400, NYC, NY, 10022, ...
   Diecast Classics Inc.
                              7586 Pompton St., Allentown, PA, 70267, USA
   Technics Stores Inc.
                              9408 Furth Circle, Burlingame, CA, 94217, USA
```

QNO: 18

Before:



Query:

update customers

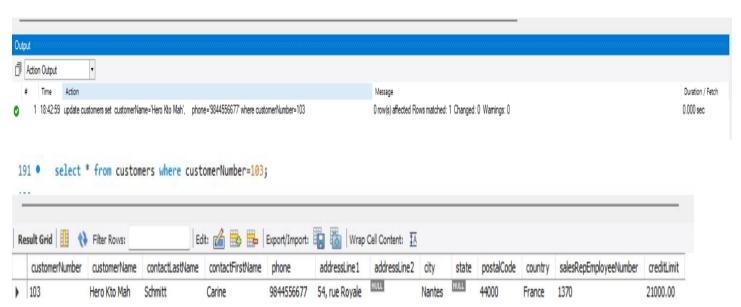
set

customerName='Hero Kto Mah',

phone='9844556677'

where customerNumber=103;

Results:



QNO: 19

QNO: 20

