```
2 ---cau1
       3 □SELECT *
            FROM
       4
       5
                 SELECT RowNum, Id, ProductName, SupplierId, UnitPrice, Package,
       6
       7
                 IsDiscontinued, MAX(RowNum) OVER (ORDER BY (SELECT 1)) AS RowLast
       8
                 FROM(
       9
                      SELECT ROW NUMBER() OVER (ORDER BY UnitPrice) AS RowNum,
      10
                                Id, ProductName, SupplierId, UnitPrice, Package,
      11
                                IsDiscontinued
      12
                      FROM Product
                 ) AS DerivedTable
      13
      14
            ) Report
            WHERE Report.RowNum >= 0.2 * RowLast
100 %
Results
            Messages
      RowNum
                 ld
                      ProductName
                                                     Supplierld
                                                                UnitPrice
                                                                          Package
                                                                                              IsDiscontinued
                                                                                                              RowLast
      16
                 46
                                                     21
                                                                12.00
                                                                           4 - 450 g glasses
                                                                                                              78
 1
                      Spegesild
                                                                                              0
 2
       17
                 68
                      Scottish Longbreads
                                                     8
                                                                12.50
                                                                           10 boxes x 8 pieces
                                                                                              0
                                                                                                              78
 3
       18
                 31
                      Gorgonzola Telino
                                                     14
                                                                 12.50
                                                                           12 - 100 g pkgs
                                                                                              0
                                                                                                              78
                                                                                              0
 4
       19
                 48
                      Chocolade
                                                     22
                                                                12.75
                                                                           10 pkgs.
                                                                                                              78
 5
       20
                  77
                      Original Frankfurter grüne Soße
                                                     12
                                                                13.00
                                                                                              0
                                                                                                              78
                                                                           12 boxes
 6
      21
                      Escargots de Bourgogne
                                                     27
                                                                13.25
                                                                           24 pieces
                                                                                              0
                                                                                                              78
                 58
 7
       22
                                                                14.00
                                                                                              0
                                                                                                              78
                 67
                      Laughing Lumberjack Lager
                                                     16
                                                                           24 - 12 oz bottles
 8
       23
                                                                                                              78
                 42
                      Singaporean Hokkien Fried Mee
                                                     20
                                                                14.00
                                                                           32 - 1 kg pkgs.
                                                                                              1
 9
       24
                 34
                      Sasquatch Ale
                                                     16
                                                                14.00
                                                                           24 - 12 oz bottles
                                                                                              0
                                                                                                              78
 10
       25
                 25
                      NuNuCa Nuß-Nougat-Creme
                                                     11
                                                                 14.00
                                                                           20 - 450 g glasses
                                                                                              0
                                                                                                              78
 11
      26
                 73
                      Röd Kaviar
                                                     17
                                                                 15.00
                                                                           24 - 150 g jars
                                                                                              0
                                                                                                              78
       27
                      Outback Lager
                                                     7
                                                                           24 - 355 ml bottles
                                                                                                              78
 12
                 70
                                                                 15.00
                                                                                              0
 13
      28
                  15
                      Genen Shouyu
                                                     6
                                                                15.50
                                                                           24 - 250 ml bottles
                                                                                              0
                                                                                                              78
 14
       29
                  50
                      Valkoinen suklaa
                                                     23
                                                                 16.25
                                                                           12 - 100 g bars
                                                                                              0
                                                                                                              78
 15
       30
                      Louisiana Hot Spiced Okra
                                                     2
                                                                 17.00
                                                                           24 - 8 oz jars
                                                                                              0
                                                                                                              78
                                                     7
                  16
                                                                                                              78
 16
       31
                      Pavlova
                                                                 17.45
                                                                           32 - 500 g boxes
                                                                                              0
 17
       32
                  1
                       Chai
                                                     1
                                                                18.00
                                                                           10 boxes x 20 bags
                                                                                              0
                                                                                                              78
      33
                 35
                      Steeleye Stout
                                                     16
                                                                18.00
                                                                           24 - 12 oz bottles
                                                                                              0
                                                                                                              78
 18
                  39
                                                     18
                                                                18.00
                                                                                              0
                                                                                                              78
 19
      34
                      Chartreuse verte
                                                                           750 cc per bottle
 20
      35
                  76
                      Lakkalikööri
                                                     23
                                                                18.00
                                                                           500 ml
                                                                                              0
                                                                                                              78
 21
       36
                 40
                      Boston Crab Meat
                                                     19
                                                                 18.40
                                                                           24 - 4 oz tins
                                                                                              0
                                                                                                              78
 22
      37
                 36
                      Inlagd Sill
                                                     17
                                                                19.00
                                                                           24 - 250 g jars
                                                                                              0
                                                                                                              78
      38
                                                                 19.00
                                                                                                              78
 23
                 2
                      Chang
                                                     1
                                                                           24 - 12 oz bottles
                                                                                              0
 24
      39
                      Gula Malacca
                                                     20
                                                                 19.45
                                                                           20 - 2 kg bags
                                                                                              0
                                                                                                              78
 25
      40
                 57
                      Ravioli Angelo
                                                     26
                                                                 19.50
                                                                           24 - 250 g pkgs.
                                                                                              0
                                                                                                              78
                                                                                              0
 26
      41
                 49
                      Maxilaku
                                                     23
                                                                20.00
                                                                           24 - 50 g pkgs.
                                                                                                              78
 27
                                                     5
       42
                  11
                      Queso Cabrales
                                                                21.00
                                                                           1 kg pkg.
                                                                                              0
                                                                                                              78
                                                     9
                                                                           24 - 500 g pkgs.
 28
      43
                 22
                      Gustaf's Knäckebröd
                                                                21.00
                                                                                              0
                                                                                                              78
```

21.05

Louisiana Fiery Hot Pepper Sa...

32 - 8 oz bottles

```
18 ---cau2
     19 SELECT OrderId, Id, ProductName, UnitPrice, Package, Quantity, STR([Percent], 5,2) + '%' AS [Percent]
     20
           FROM
     21
     22
                SELECT O.OrderId, P.Id, P.ProductName, P.UnitPrice, P.Package, O.Quantity,
     23
                CAST(O.Quantity AS DECIMAL(5,2))*100/ (SUM(O.Quantity) OVER (PARTITION BY O.OrderId)) AS [Percent]
     24
                FROM OrderItem AS O
                INNER JOIN Product AS P ON O.ProductId = P.Id
     25
     26
            ) Report
           ORDER BY Report.OrderId
     27
     28
100 % -
 Results 🛅 Messages
      Orderld Id ProductName
                                                    UnitPrice Package
                                                                               Quantity
                                                                                         Percent
                                                                                         44.44%
               11 Queso Cabrales
                                                    21.00
                                                              1 kg pkg.
                                                                                12
                42 Singaporean Hokkien Fried Mee
                                                                                         37.04%
 2
                                                    14.00
                                                              32 - 1 kg pkgs.
                                                                                10
 3
                72 Mozzarella di Giovanni
                                                    34.80
                                                              24 - 200 g pkgs.
                                                                                5
                                                                                         18.52%
 4
      2
                14
                                                    23.25
                                                              40 - 100 g pkgs.
                                                                                9
                                                                                         18.37%
 5
                                                    53.00
                                                                                         81.63%
      2
               51 Manjimup Dried Apples
                                                              50 - 300 g pkgs.
                                                                                40
 6
      3
               41 Jack's New England Clam Chowder
                                                   9.65
                                                                                10
                                                                                         16.67%
                                                              12 - 12 oz cans
 7
      3
                                                    53.00
               51 Manjimup Dried Apples
                                                              50 - 300 g pkgs.
                                                                                35
                                                                                         58.33%
 8
      3
                                                   21.05
               65 Louisiana Fiery Hot Pepper Sauce
                                                              32 - 8 oz bottles
                                                                                15
                                                                                         25.00%
 9
      4
               22 Gustaf's Knäckebröd
                                                    21.00
                                                              24 - 500 g pkgs.
                                                                                6
                                                                                         14.63%
 10
      4
               57 Ravioli Angelo
                                                    19.50
                                                              24 - 250 g pkgs.
                                                                                15
                                                                                         36.59%
 11
      4
               65 Louisiana Fiery Hot Pepper Sauce
                                                    21.05
                                                              32 - 8 oz bottles
                                                                                20
                                                                                         48.78%
 12
      5
               20 Sir Rodney's Marmalade
                                                    81.00
                                                                                         38.10%
                                                              30 aift boxes
                                                                                40
               33 Geitost
 13
      5
                                                    2.50
                                                              500 g
                                                                                25
                                                                                         23.81%
 14
      5
               60 Camembert Pierrot
                                                    34.00
                                                              15 - 300 g rounds
                                                                                40
                                                                                         38.10%
 15
      6
               31 Gorgonzola Telino
                                                    12.50
                                                                                         19.61%
                                                              12 - 100 g pkgs
                                                                                20
 16
      6
               39 Chartreuse verte
                                                    18.00
                                                                                42
                                                                                         41.18%
                                                              750 cc per bottle
 17
      6
               49 Maxilaku
                                                    20.00
                                                                                40
                                                                                         39.22%
                                                              24 - 50 g pkgs.
 18
      7
               24 Guaraná Fantástica
                                                    4.50
                                                              12 - 355 ml cans
                                                                                15
                                                                                         26.32%
 19
      7
               55 Pâté chinois
                                                    24.00
                                                              24 boxes x 2 pies
                                                                               21
                                                                                         36.84%
 20
               74 Longlife Tofu
                                                    10.00
                                                                                21
                                                                                         36.84%
                                                              5 ka pka.
 21
                                                    19.00
                                                              24 - 12 oz bottles
                                                                                         18.18%
      8
               2
                    Chang
                                                                                20
                16 Pavlova
 22
                                                    17.45
      8
                                                              32 - 500 g boxes
                                                                                35
                                                                                         31.82%
 23
      8
               36 Inlagd Sill
                                                    19.00
                                                              24 - 250 g jars
                                                                                25
                                                                                         22.73%
 24
      8
               59 Raclette Courdavault
                                                    55.00
                                                              5 kg pkg.
                                                                                30
                                                                                         27.27%
 25
      9
               53 Perth Pasties
                                                    32.80
                                                              48 pieces
                                                                                15
                                                                                         55.56%
 26
      9
               77 Original Frankfurter grüne Soße
                                                    13 00
                                                              12 boxes
                                                                                12
                                                                                         44 44%
 27
      10
               27 Schoggi Schokolade
                                                    43.90
                                                              100 - 100 g pieces
                                                                               25
                                                                                         54.35%
 28
       10
               39 Chartreuse verte
                                                    18.00
                                                              750 cc per bottle
                                                                                         13.04%
 29
                                                    13.00
       10
               77 Original Frankfurter grüne Soße
                                                              12 boxes
                                                                                15
                                                                                         32.61%
```

```
29 ---cau3
     30 DIF EXISTS (SELECT * FROM INFORMATION_SCHEMA.TABLES
                    WHERE TABLE NAME = N'Company')
     31
     32 BEGIN
             DROP TABLE Company
     33
     34
     35
     36
     37
     38
         SELECT Id, CompanyName,
     39
                  (CASE Country
     40
                      WHEN 'USA' THEN 'USA'
                       WHEN 'UK' THEN 'UK'
     41
                       WHEN 'France' THEN 'France'
     42
     43
                       WHEN 'Germany' THEN 'Germany'
                       ELSE 'Other'
     44
     45
                  END) AS Country INTO Company
     46
          FROM Supplier
     47
     48
     49
        SELECT C.Id, C.CompanyName,
                  ISNULL(C.[USA],0) AS [USA],
     50
                 ISNULL(C.[UK],0) AS [UK],
     51
     52
                 ISNULL(C.[France],0) AS [France],
                 ISNULL(C.[Germany],0) AS [Germany],
     53
                 ISNULL(C.[Other],0) AS [Other]
     54
     55
     56
     57
          FROM
     58
              SELECT * FROM Company
     59
     60
              PIVOT (COUNT(Country) FOR Country IN ([USA],[UK],[France],[Germany],[Other])) AS PivotedCompany
     61
          ORDER BY C.Id
     62
     63
100 %
Results 🛅 Messages
     Id CompanyName
                                     USA
                                          UK
                                               France
                                                      Germany
                                                               Other
     1 Exotic Liquids
                                     0
                                           1
                                               0
                                                       0
                                                                0
 1
2
                                                                0
      2 New Orleans Cajun Delights
                                           0
                                                       0
3
                                           0
                                                                0
     3 Grandma Kelly's Homestead
 4
                                                      0
         Tokyo Traders
                                     0
                                           0
                                               0
                                                                1
 5
        Cooperativa de Quesos 'Las Cabras'
                                     0
                                           0
                                               0
                                                      0
                                                                1
 6
                                     0
                                           0
                                                      0
     6 Mayumi's
                                               0
                                                                1
 7
                                                      0
      7 Pavlova, Ltd.
                                     0
                                           0
                                               0
                                                                1
                                     0
                                               0
                                                      0
                                                                0
 8
      8 Specialty Biscuits, Ltd.
                                           1
    9 PR Knäckehröd AR
```

```
64 --- cau4
      65 ESELECT O.OrderNumber,
                     OrderDate = CONVERT(VARCHAR(10), 0. OrderDate, 103),
      66
      67
                     CustomerName = C.FirstName + SPACE(1) + C.LastName,
                     [Address] = 'Phone: ' + C.Phone + ', ' + 'City: ' + C.City + ' and Country: ' + C.Country,
      68
                     TotalAmount = LTRIM(STR(CAST(0.TotalAmount AS DECIMAL(10)),10,0) + ' Euro')
      69
      70
            FROM [Order] 0
            INNER JOIN Customer C ON O.CustomerId = C.Id
      71
      72
            ORDER BY O.Id
73
100 % <del>•</del>
 Results 🔓 Messages
       OrderNumber
                      OrderDate
                                   CustomerName
                                                        Address
                                                                                                          TotalAmount
       542378
                      04/07/2012 Paul Henriot
                                                        Phone: 26.47.15.10, City: Reims and Country: France
                                                                                                          440 Euro
 2
       542379
                      05/07/2012
                                    Karin Josephs
                                                        Phone: 0251-031259, City: Münster and Country: Ge...
                                                                                                          1863 Euro
 3
       542380
                      08/07/2012 Mario Pontes
                                                        Phone: (21) 555-0091, City: Rio de Janeiro and Coun...
                                                                                                          1813 Euro
 4
                      08/07/2012 Mary Saveley
       542381
                                                        Phone: 78.32.54.86, City: Lyon and Country: France
                                                                                                          671 Euro
 5
       542382
                      09/07/2012 Pascale Cartrain
                                                        Phone: (071) 23 67 22 20, City: Charleroi and Countr...
                                                                                                          3730 Euro
 6
       542383
                      10/07/2012 Mario Pontes
                                                        Phone: (21) 555-0091, City: Rio de Janeiro and Coun...
                                                                                                          1445 Euro
 7
       542384
                      11/07/2012
                                   Yang Wang
                                                        Phone: 0452-076545, City: Bern and Country: Switze...
                                                                                                          625 Euro
 8
       542385
                      12/07/2012 Michael Holz
                                                        Phone: 0897-034214, City: Genève and Country: Sw...
                                                                                                          2491 Furo
 9
       542386
                      15/07/2012 Paula Parente
                                                        Phone: (14) 555-8122, City: Resende and Country: B...
                                                                                                          518 Euro
 10
       542387
                      16/07/2012 Carlos Hemández
                                                        Phone: (5) 555-1340, City: San Cristóbal and Country...
                                                                                                          1120 Euro
       542388
                      17/07/2012 Roland Mendel
                                                        Phone: 7675-3425, City: Graz and Country: Austria
 11
                                                                                                          2019 Euro
 12
       542389
                      18/07/2012 Francisco Chang
                                                        Phone: (5) 555-3392, City: México D.F. and Country: ...
                                                                                                          101 Euro
 13
       542390
                      19/07/2012 Henriette Pfalzheim
                                                        Phone: 0221-0644327, City: Köln and Country: Gem...
                                                                                                          1746 Furo
 14
       542391
                      19/07/2012 Bernardo Batista
                                                        Phone: (21) 555-4252, City: Rio de Janeiro and Coun...
                                                                                                          448 Euro
       542392
                      22/07/2012 Paula Wilson
                                                        Phone: (505) 555-5939, City: Albuquerque and Coun...
 15
                                                                                                          625 Euro
 16
       542393
                      23/07/2012
                                   Roland Mendel
                                                        Phone: 7675-3425, City: Graz and Country: Austria
                                                                                                          2465 Euro
 17
       542394
                      24/07/2012 Maria Larsson
                                                        Phone: 0695-34 67 21, City: Bräcke and Country: S...
                                                                                                          725 Furo
 18
       542395
                      25/07/2012 Frédérique Citeaux
                                                        Phone: 88.60.15.31, City: Strasbourg and Country: Fr... 1176 Euro
       542396
                      26/07/2012 Pirkko Koskitalo
                                                        Phone: 981-443655, City: Oulu and Country: Finland
 19
                                                                                                          365 Euro
 20
       542397
                      29/07/2012 Peter Franken
                                                        Phone: 089-0877310, City: München and Country: G...
                                                                                                          4031 Euro
 21
       542398
                      30/07/2012 Manuel Pereira
                                                        Phone: (2) 283-2951, City: Caracas and Country: Ve...
                                                                                                          1101 Euro
 22
       542399
                      31/07/2012 Karl Jablonski
                                                        Phone: (206) 555-4112, City: Seattle and Country: U...
                                                                                                          676 Euro
 23
       542400
                      01/08/2012 Pirkko Koskitalo
                                                        Phone: 981-443655, City: Oulu and Country: Finland
                                                                                                          1376 Euro
 24
       542401
                      01/08/2012 Art Braunschweiger
                                                        Phone: (307) 555-4680, City: Lander and Country: U...
                                                                                                          48 Euro
 25
       542402
                      02/08/2012
                                   Paula Wilson
                                                        Phone: (505) 555-5939, City: Albuquerque and Coun...
                                                                                                          1456 Euro
                      05/08/2012 Horst Kloss
 26
       542403
                                                        Phone: 0372-035188, City: Cunewalde and Country: ...
                                                                                                          2142 Euro
 27
       542404
                      06/08/2012 Paul Henriot
                                                        Phone: 26.47.15.10, City: Reims and Country: France
                                                                                                          539 Furo
 28
       542405
                      07/08/2012 Giovanni Rovelli
                                                        Phone: 035-640230, City: Bergamo and Country: Italy
                                                                                                          307 Euro
```

```
74 ---cau5
     75
     76 SELECT Id, ProductName, SupplierId, UnitPrice,
                    Package = STUFF(Package, CHARINDEX('bags', Package), LEN('bags'), N'túi')
     77
           FROM Product
     78
          WHERE Package LIKE '%bags%'
     79
     80
100 % -
Results 🚹 Messages
          ProductName
                                   Supplierld
                                              UnitPrice
                                                       Package
 1
     1
                                    1
                                              18.00
                                                       10 boxes x 20 túi
 2
      26 Gumbär Gummibärchen
                                    11
                                              31.23
                                                       100 - 250 g túi
 3
      29
          Thüringer Rostbratwurst
                                    12
                                              123.79
                                                       50 túi x 30 sausgs.
 4
      44 Gula Malacca
                                   20
                                              19.45
                                                       20 - 2 kg túi
 5
      64 Wimmers gute Semmelknödel
                                   12
                                              33.25
                                                       20 túi x 4 pieces
```

```
81 ---cau6
     82 SELECT CustomerId, COUNT(OrderNumber) AS OrderCount INTO OCount
     83
           FROM [Order]
      84 GROUP BY CustomerId
     85
      86 SELECT*
      87 FROM OCount
      88
     89 ESELECT OC. CustomerId,
                   CustomerName = C.FirstName + SPACE(1) + C.LastName ,
     90
     91
                   OC.OrderCount.
     92
                   [Rank] = DENSE_RANK() OVER (ORDER BY OrderCount),
                   [Group] = NTILE(3) OVER (ORDER BY OC.OrderCount DESC)
     93
           FROM OCount OC
     94
     95
           INNER JOIN Customer C ON OC.CustomerId = C.Id
          ORDER BY OC.OrderCount DESC
     96
      97
100 % ▼ <
Results
           Messages Messages
      Customerld
                  CustomerName
                                   OrderCount |
                                                Rank
                                                      Group
      71
                  Jose Pavarotti
                                    31
                                                21
 1
                                                       1
 2
      20
                   Roland Mendel
                                    30
                                                20
                                                       1
 3
      63
                  Horst Kloss
                                    28
                                                19
                                                       1
 4
      24
                  Maria Larsson
                                    19
                                                18
                                                       1
 5
      37
                  Patricia McKenna
                                    19
                                                18
                                                       1
 6
      35
                  Carlos Hemández
                                    18
                                                17
                                                       1
 7
      5
                  Christina Berglund
                                    18
                                                17
                                                       1
 8
      65
                  Paula Wilson
                                    18
                                                17
                                                       1
 9
                                    17
      9
                  Laurence Lebihan
                                                16
                                                       1
 10
      87
                  Pirkko Koskitalo
                                    15
                                                15
                                                       1
 11
      44
                  Renate Messner
                                    15
                                                15
                                                       1
      25
                  Peter Franken
                                    15
 12
                                                15
                                                       1
 13
      10
                   Elizabeth Lincoln
                                    14
                                                14
                                                       1
                                    14
 14
      41
                  Annette Roulet
                                                14
                                                       1
 15
                  Philip Cramer
                                                       1
      39
                                    14
                                                14
                  Mario Pontes
 16
      34
                                    14
                                                14
                                                       1
                                                       1
 17
      46
                  Carlos González
                                    14
                                                14
 18
      89
                  Karl Jablonski
                                    14
                                                14
                                                       1
 19
      4
                   Thomas Hardy
                                    13
                                                13
                                                       1
 20
      62
                  Lúcia Carvalho
                                    13
                                                13
                                                       1
 21
      51
                  Jean Fresnière
                                    13
                                                13
                                                       1
 22
      66
                  Maurizio Moroni
                                    12
                                                12
                                                       1
 23
      47
                  Felipe Izquierdo
                                    12
                                                12
                                                       1
 24
      76
                  Pascale Cartrain
                                    12
                                                12
                                                       1
 25
                                                       1
      83
                  Palle Ibsen
                                    11
                                                11
 26
      7
                  Frédérique Citeaux
                                    11
                                                       1
                                                11
```