import pandas as pd In [1]: data = pd.read_csv(r"D:\Unified_Internship\My_projectWork\Project1\Amazon Sales dataa_csv.csv") data.head() In [3]: Sales Order Order Units Unit Unit **Total** Out[3]: Total Order ID Ship Date **Total Cost** Region Country **Item Type** Channel Revenue **Priority** Date Sold Price Cost Profit 2010-05-2010-06-669165933 951410.50 Australia and Oceania Offline Н 9925 255.28 159.42 2533654.00 1582243.50 Tuvalu Baby Food 28 27 Central America and the 2012-08-2012-09-1 Grenada Cereal Online С 963881480 2804 205.70 117.11 576782.80 328376.44 248406.36 22 Caribbean 15 Office 2014-05-2014-05-341417157 2 Offline 1779 651.21 524.96 1158502.59 933903.84 224598.75 Europe Russia Supplies 80 Sao Tome and 2014-07-Sub-Saharan Africa Fruits Online 514321792 8102 9.33 6.92 75591.66 56065.84 19525.82 Principe 20 05 Office 2013-02-2013-02-Sub-Saharan Africa Offline 115456712 5062 651.21 524.96 3296425.02 2657347.52 639077.50 Rwanda Supplies 01 06 data.tail() Region Country Item Type Sales Channel Order Priority Order Date Order ID Ship Date Units Sold Unit Price Unit Cost Total Revenue **Total Cost Total Profit** Out[4]: 95 Sub-Saharan Africa Mali Clothes Online M 2011-07-26 512878119 2011-09-03 109.28 35.84 97040.64 31825.92 65214.72 58471.11 96 Malaysia Offline L 2011-11-11 810711038 2011-12-28 15103.47 Asia Fruits 6267 9.33 6.92 43367.64 228779.10 135031.05 97 Sub-Saharan Africa Sierra Leone Vegetables Offline C 2016-06-01 728815257 2016-06-29 1485 154.06 90.93 93748.05 98 Mexico Personal Care Offline M 2015-07-30 559427106 2015-08-08 471336.91 326815.89 144521.02 North America 5767 81.73 56.67 3586605.09 2697132.18 99 Sub-Saharan Africa Mozambique Offline L 2012-02-10 665095412 2012-02-15 5367 668.27 502.54 889472.91 Household data.shape In [5]: (100, 14)Out[5]: data.columns In [6]: Index(['Region', 'Country', 'Item Type', 'Sales Channel', 'Order Priority', Out[6]: 'Order Date', 'Order ID', 'Ship Date', 'Units Sold', 'Unit Price', 'Unit Cost', 'Total Revenue', 'Total Cost', 'Total Profit'], dtype='object') data.info() In [7]: <class 'pandas.core.frame.DataFrame'> RangeIndex: 100 entries, 0 to 99 Data columns (total 14 columns): Non-Null Count Dtype Column 0 Region 100 non-null object 100 non-null object Country Item Type 100 non-null object Sales Channel 100 non-null object Order Priority 100 non-null object 5 Order Date 100 non-null object 6 Order ID 100 non-null int64 Ship Date 100 non-null object 8 Units Sold 100 non-null int64 Unit Price 100 non-null 9 float64 Unit Cost 100 non-null float64 10 Total Revenue 100 non-null float64 11 Total Cost 100 non-null 12 float64 float64 100 non-null 13 Total Profit dtypes: float64(5), int64(2), object(7) memory usage: 11.1+ KB data.isnull().sum() In [8]: 0 Region Out[8]: Country 0 Item Type 0 Sales Channel 0 Order Priority 0 Order Date 0 Order ID 0 Ship Date 0 Units Sold 0 Unit Price 0 Unit Cost 0 Total Revenue 0 Total Cost 0 Total Profit 0 dtype: int64 data.describe() In [9]: **Total Cost Order ID Units Sold Unit Price** Unit Cost Total Revenue **Total Profit** Out[9]: **count** 1.000000e+02 100.000000 100.000000 100.000000 1.000000e+02 1.000000e+02 1.000000e+02 mean 5.550204e+08 5128.710000 276.761300 191.048000 1.373488e+06 9.318057e+05 4.416820e+05 **std** 2.606153e+08 2794.484562 235.592241 188.208181 1.460029e+06 1.083938e+06 4.385379e+05 min 1.146066e+08 6.920000 4.870260e+03 3.612240e+03 1.258020e+03 124.000000 9.330000 **25**% 3.389225e+08 2836.250000 81.730000 35.840000 2.687212e+05 1.688680e+05 1.214436e+05 **50%** 5.577086e+08 5382.500000 179.880000 107.275000 7.523144e+05 3.635664e+05 2.907680e+05 7.907551e+08 7369.000000 437.200000 263.330000 2.212045e+06 1.613870e+06 6.358288e+05 max 9.940222e+08 9925.000000 668.270000 524.960000 5.997055e+06 4.509794e+06 1.719922e+06 data['Item Type'].unique() In [10]: array(['Baby Food', 'Cereal', 'Office Supplies', 'Fruits', 'Household', Out[10]: 'Vegetables', 'Personal Care', 'Clothes', 'Cosmetics', 'Beverages', 'Meat', 'Snacks'], dtype=object) data['Order Year'] = pd.DatetimeIndex(data['Order Date']).year data['Order Quarter'] = pd.DatetimeIndex(data['Order Date']).quarter data['Order Month'] = pd.DatetimeIndex(data['Order Date']).month data1 = data[['Region', 'Country', 'Item Type', 'Sales Channel', 'Order Priority', In [12]: 'Order Date', 'Order Year', 'Order Quarter', 'Order Month', 'Order ID', 'Ship Date', 'Units Sold', 'Unit Price', 'Unit Cost', 'Total Revenue', 'Total Cost', 'Total Profit']] data1 In [13]: Out[13]: Sales Order Order Order Order Order Ship Units Unit Unit Total Total Country Order ID **Total Cost** Region **Item Type** Channel **Priority** Year Quarter Month **Date** Sold **Price** Cost **Profit** Date Revenue 2010-Australia and 2010-5 669165933 0 1582243.50 951410.50 Tuvalu Baby Food Offline Н 2010 2 9925 255.28 159.42 2533654.00 05-28 06-27 Oceania Central America 2012-2012-328376.44 248406.36 С 3 8 963881480 Grenada Cereal Online 2012 2804 205.70 117.11 576782.80 and the Caribbean 08-22 09-15 Office 2014-2014-2 Offline 2 5 341417157 Europe Russia 2014 1779 651.21 524.96 1158502.59 933903.84 224598.75 Supplies 05-02 05-08 Sao Tome and 2014-2014-С 2 6 514321792 56065.84 3 Sub-Saharan Africa Fruits Online 2014 8102 9.33 6.92 75591.66 19525.82 06-20 07-05 Principe Office 2013-2013-Offline 2013 2 115456712 4 Sub-Saharan Africa Rwanda 1 5062 651.21 524.96 3296425.02 2657347.52 639077.50 02-01 02-06 Supplies 2011-2011-95 Sub-Saharan Africa 97040.64 31825.92 Mali Clothes Online Μ 2011 3 7 512878119 888 109.28 35.84 65214.72 09-03 07-26 2011-2011-96 Offline 2011 4 11 810711038 9.33 6.92 58471.11 43367.64 15103.47 Asia Malaysia Fruits 6267 12-28 11-11 2016-2016-6 728815257 Sierra Leone Vegetables 2016 1485 154.06 90.93 228779.10 135031.05 93748.05 Sub-Saharan Africa Offline 06-01 2015-2015-Personal 326815.89 144521.02 98 North America Offline 2015 7 559427106 471336.91 Mexico 81.73 56.67 2012-2012-99 Sub-Saharan Africa 2 665095412 Mozambique Household Offline 2012 1 5367 668.27 502.54 3586605.09 2697132.18 889472.91 02-10 100 rows × 17 columns In [14]: sort_data1 = data1.sort_values(by = ['Units Sold'], ascending = False) Items_sold = sort_data1[['Region','Item Type','Order Year','Order Quarter','Order Month','Units Sold']] Items_sold.head(5) In [16]: Region Item Type Order Year Order Quarter Order Month Units Sold Out[16]: 0 Baby Food 9925 Australia and Oceania 2010 56 Australia and Oceania Clothes 2010 2 6 9905 74 Middle East and North Africa Cosmetics 3 7 2013 9892 7 79 Australia and Oceania Cosmetics 2013 3 9654 51 2013 3 8 Sub-Saharan Africa Fruits 9606 Items_sold.tail(5) Item Type Order Year Order Quarter Order Month Units Sold Out[17]: Region 88 Middle East and North Africa Fruits 2012 522 58 2012 1 1 282 Europe Household 47 Europe Personal Care 2010 12 273 4 Vegetables 43 2012 10 171 Europe 10 Vegetables 2011 2 6 124 Asia sort_data2 = data1.sort_values(by = ['Total Revenue'], ascending=False) In [18]: Items_revenue = sort_data2[['Region','Item Type','Order Year','Order Quarter','Order Month','Units Sold','Total Revenue']] Items_revenue.head(5) In [20]: Item Type Order Year Order Quarter Order Month Units Sold Out[20]: Region **Total Revenue** 13 Central America and the Caribbean Household 2017 1 8974 5997054.98 33 Household 2015 8250 5513227.50 Asia 68 Europe Office Supplies 2010 4 10 8287 5396577.27 75 North America Household 11 6954 4647149.58 2014 2 38 4368316.68 Asia Office Supplies 2012 4 6708 Items_revenue.tail(5) Item Type Order Year Order Quarter Order Month Units Sold Total Revenue Out[21]: Region 47 Europe Personal Care 2010 12 273 22312.29 23 2014 2187 Australia and Oceania 20404.71 Fruits 10 Vegetables 2011 2 124 19103.44 6279.09 71 Middle East and North Africa 2015 3 673 Fruits 88 Middle East and North Africa Fruits 2012 2 522 4870.26 sort_data3 = data1.sort_values(by = ['Total Profit'], ascending = False) In [22]: In [23]: | items_profit = sort_data3[['Region','Item Type','Order Year','Order Quarter','Order Month','Units Sold','Total Revenue','Total Profit']] items_profit.head(5) In [24]: Out[24]: Region Item Type Order Year Order Quarter Order Month Units Sold Total Revenue Total Profit 74 Middle East and North Africa Cosmetics 2013 9892 4324782.40 1719922.04 79 Australia and Oceania Cosmetics 2013 3 7 9654 4220728.80 1678540.98 46 4 12 Europe Cosmetics 2016 8867 3876652.40 1541705.29 9 30 Europe Cosmetics 2012 3 8661 3786589.20 1505888.07 2 13 Central America and the Caribbean Household 2017 1 8974 5997054.98 1487261.02 items_profit.tail(5) Region Item Type Order Year Order Quarter Order Month Units Sold Total Revenue Total Profit Out[25]: 10 Asia Vegetables 2011 2 6 124 19103.44 7828.12 47 2010 12 273 Europe Personal Care 22312.29 6841.38 23 Australia and Oceania 2014 3 9 2187 20404.71 5270.67 Fruits 71 Middle East and North Africa 3 8 2015 673 6279.09 1621.93 Fruits 88 Middle East and North Africa Fruits 2012 2 4 522 4870.26 1258.02 Year_wise = data1.sort_values(by = ['Order Month']) In [26]: Year_2010 = Year_wise[(Year_wise['Order Year'] == 2010)] In [27]: Year_2010 In [28] **Sales** Order Order Order Order Ship Units Unit Unit Out[28]: Order **Total Total Cost Total Profit** Region Country **Item Type** Order ID Channel **Priority Price** Cost Date Year Quarter Month **Date** Sold Revenue 2010-2010-50 Clothes Online С 2010 2 385383069 2269 109.28 35.84 247956.32 81320.96 166635.36 Europe Albania 1 02-02 03-18 Middle East and 2010-2010-41 Azerbaijan Online Μ 2010 1 2 382392299 7234 437.20 263.33 3162704.80 1904929.22 1257775.58 Cosmetics North Africa 02-06 02-25 Australia and 2010-2010-Baby Food 5 669165933 1582243.50 0 Tuvalu Offline 2010 2 9925 255.28 159.42 2533654.00 951410.50 Oceania 05-28 06-27 Sub-Saharan 2010-2010-27 Mali Fruits Online 2010 2 5 686048400 5822 6.92 54319.26 40288.24 14031.02 9.33 Africa 05-07 05-10 Australia and 2010-2010-6 647876489 1082418.40 56 Fiji Clothes Offline С 2010 2 9905 109.28 35.84 354995.20 727423.20 Oceania 06-30 08-01 Office 2010-2010-68 Lithuania Offline Н 2010 4 10 166460740 8287 651.21 524.96 5396577.27 4350343.52 1046233.75 Europe Supplies 10-24 11-17 Middle East and 2010-2010-63 Libya Clothes Offline 2010 4 10 705784308 6116 109.28 35.84 668356.48 219197.44 449159.04 North Africa 10-30 11-17 2010-2010-11 660643374 2082940.30 1375311.70 93 Cosmetics Online 2010 437.20 263.33 3458252.00 Europe Romania 7910 11-26 12-25 Personal 2010-2011-47 Switzerland Online 2010 4 12 617667090 81.73 56.67 22312.29 15470.91 6841.38 Europe M 273 Care 12-23 01-31 2010-2011-18 Offline 2010 12 441619336 3830 668.27 502.54 2559474.10 1924728.20 Asia Turkmenistan Household 12-30 01-20 Year_2011 = Year_wise[(Year_wise['Order Year'] == 2011)] Year_2011 In [30] Out[30]: Sales Order Order Order Order Order Ship Units Unit Unit Total **Total** Region Country Item Type Order ID **Total Cost** Channel **Priority** Quarter **Price** Date Year Month Date Sold Cost Revenue Profit 2011-2011-Sub-Saharan Sao Tome and 86 Offline 1 180283772 47.45 418936.05 280673.91 138262.14 Beverages 2011 8829 Africa Principe 01-16 01-21 Sub-Saharan 2011-2011-83 Online 1 122583663 97.44 Zambia Snacks 2011 1 4085 152.58 623289.30 398042.40 225246.90 Africa 01-04 01-05 2011-2011-Central America Beverages Offline С 2011 963392674 8156 47.45 31.79 387002.20 259279.24 127722.96 Nicaragua 1 and the Caribbean 02-08 03-21 2011-2011-Sub-Saharan 6 Household Offline Μ 2 4 135425221 668.27 502.54 2798046.49 2104134.98 693911.51 Angola 2011 4187 Africa 04-23 04-27 Democratic Sub-Saharan 2011-2011-2 72 Republic of the Beverages Online С 2011 5 585920464 5741 47.45 31.79 272410.45 182506.39 89904.06 05-26 07-15 Africa Congo 2011-2011-Н 2 6 814711606 90.93 19103.44 11275.32 7828.12 10 Vegetables Online 2011 154.06 Asia Kyrgyzstan 124 06-24 07-12 Sub-Saharan 2011-2011-31825.92 95 Μ 3 7 512878119 109.28 Mali Clothes Online 2011 888 35.84 97040.64 65214.72 Africa 07-26 09-03 2011-2011-С 339350.76 235601.16 Offline 2011 3 9 789176547 154.06 90.93 574951.92 77 Asia Vegetables 3732 Laos 09-15 10-23 2011-2011-43367.64 Offline 11 810711038 6267 58471.11 15103.47 96 Malaysia Fruits L 2011 4 9.33 6.92 Asia 11-11 12-28 Sub-Saharan Office 2011-2012-53 Offline Μ 11 441888415 2251232.97 1814786.72 436446.25 Sierra Leone 2011 4 3457 651.21 524.96 11-26 01-07 Africa Supplies Middle East and 2011-2011-36 11 162052476 Fruits Online 2011 4 3784 9.33 6.92 35304.72 26185.28 9119.44 Syria North Africa 11-22 12-03 Sub-Saharan Office 2011-2011-62 Μ 4 11 177636754 3593376.78 2896729.28 696647.50 Cameroon Online 2011 5518 651.21 524.96 Africa 11-07 11-15 Supplies Year_2012 = Year_wise[(Year_wise['Order Year'] == 2012)] In [31]: Year_2012 In [32]: Out[32]: Sales Order Order Order Order Order Ship Units Unit Unit Total **Order ID Total Cost Total Profit** Region Country **Item Type** Channel Month **Date** Price Revenue **Priority** Date Year Quarter Sold Cost Office 2012-2012-824431.86 Offline 1 837559306 664599.36 159832.50 Sub-Saharan Africa Mauritania С 2012 1266 651.21 524.96 1 Supplies 01-11 01-13 United 2012-2012-58 668.27 502.54 141716.28 Online L 2012 1 1 955357205 282 188452.14 46735.86 Europe Household Kingdom 01-05 02-14 Personal 2012-2012-85 North America Offline 2012 2 430915820 6422 524870.06 363934.74 160935.32 Mexico L 1 81.73 56.67 02-17 Care 03-20 Office 2012-2012-2596374.27 2093015.52 503358.75 2012 651.21 39 Bulgaria Online Μ 1 2 189965903 3987 524.96 Europe Supplies 02-16 02-28 2012-2012-889472.91 Household Offline 2012 2 665095412 668.27 502.54 3586605.09 2697132.18 99 Sub-Saharan Africa Mozambique L 1 5367 02-10 02-15 2012-2012-994765.42 587135.01 407630.41 Sub-Saharan Africa Vegetables Online L 2012 1 3 827844560 6457 154.06 90.93 84 Kenya 03-18 04-07 Office 2012-2012-2 Online 2012 4 320009267 6708 651.21 4368316.68 3521431.68 846885.00 38 Asia L 524.96 Brunei Supplies 04-01 05-08 2012-2012-2 109.28 182825.44 59960.32 122865.12 15 Online Μ 2012 4 972292029 1673 35.84 Europe Bulgaria Clothes 04-23 06-03 Middle East and 2012-2012-88 Μ 2012 2 4 513417565 522 9.33 6.92 4870.26 1258.02 Fruits Online 3612.24 Kuwait North Africa 04-30 05-18 2012-2012-2198981.92 1373243.88 78 Offline Н 2 5 688288152 159.42 825738.04 Baby Food 2012 8614 255.28 Europe Monaco 05-29 06-02 2012-2012-2 The Gambia Household Offline 2012 5 886494815 2370 668.27 502.54 1583799.90 1191019.80 392780.10 Sub-Saharan Africa L 05-26 06-09 2012-2012-С 2012 2 6 114606559 109.28 124794.88 255718.08 Sub-Saharan Africa Cote d'Ivoire Clothes Online 3482 35.84 380512.96 55 06-08 06-27 Middle East and Office 2012-2012-6 423331391 92 2012 2 2021 651.21 1316095.41 1060944.16 Azerbaijan Online Μ 524.96 255151.25 North Africa Supplies 06-13 07-24 2012-2012-The Gambia Н 2 6 994022214 247921.87 42 Sub-Saharan Africa Offline 2012 2117 205.70 117.11 435466.90 187545.03 Cereal 06-07 06-08 Personal 2012-2012-Offline 2012 3 7 228944623 8656 707454.88 490535.52 66 Sub-Saharan Africa Gabon 81.73 56.67 216919.36 L Care 07-08 07-09 2012-2012-Sub-Saharan Africa 871543967 Burkina Faso Vegetables 2012 510216.66 07-17 07-27 Australia and 2012-2012-2012 3 337937.60 19 Online 7 322067916 5908 421.89 2492526.12 2154588.52 East Timor Meat L 364.69 07-31 Oceania 09-11 Central America 2012-2012-117.11 248406.36 С 2012 3 8 963881480 2804 205.70 576782.80 328376.44 1 Online Grenada Cereal and the Caribbean 08-22 09-15 Middle East and 2012-2012-3 81 2012 9 663110148 109.28 861563.52 282562.56 579000.96 Lebanon Clothes Online L 7884 35.84 North Africa 09-18 10-08 2012-2012-30 Switzerland 3 3786589.20 2280701.13 1505888.07 Offline Μ 2012 9 249693334 8661 437.20 263.33 Europe Cosmetics 09-17 10-20 2012-2012-80 Household Offline 2012 4 10 213487374 4513 668.27 502.54 3015902.51 2267963.02 747939.49 L Europe Spain 10-21 11-30 2012-2012-43 Vegetables Н 10 759224212 90.93 10795.23 Online 2012 4 171 154.06 26344.26 15549.03 Europe Slovakia 10-06 11-10 Year_2013 = Year_wise[(Year_wise['Order Year'] == 2013)] Year_2013 In [34]: Order Order Sales Order Order Order Ship Units Unit Unit Out[34]: Total Item Type **Order ID Total Cost Total Profit** Region Country Channel **Priority** Date Year Quarter Month Date Sold **Price** Cost Revenue Office 2013-2013-Offline 2013 2 115456712 3296425.02 639077.50 4 Sub-Saharan Africa Rwanda 1 5062 651.21 524.96 2657347.52 Supplies 02-01 02-06 Middle East and 2013-2013-52 2013 3 844530045 205.70 117.11 475817.93 359941.17 Saudi Arabia Cereal Online Μ 1 4063 835759.10 North Africa 03-25 03-28 2013-Office 2013-2630049.60 Online 70 2013 2 462405812 5010 651.21 3262562.10 632512.50 Asia Turkmenistan Μ 524.96 Supplies 04-23 05-20 Australia and 2013-2013-60 Offline 2013 2 6 450563752 205.70 140287.40 79869.02 60418.38 Australia Cereal Н 682 117.11 06-09 07-02 Oceania 2013-2013-Online 2013 2 4750 1212580.00 61 Europe San Marino Baby Food 6 569662845 255.28 159.42 757245.00 455335.00 06-26 07-01 Middle East and 2013-2013-4324782.40 2604860.36 1719922.04 Offline 2013 3 7 231145322 9892 437.20 263.33 74 Pakistan Cosmetics L North Africa 07-05 08-16 Australia and 2013-2013-79 2013 3 7 670854651 9654 437.20 263.33 4220728.80 2542187.82 1678540.98 Samoa Cosmetics Online Н 07-20 08-07 Oceania 2013-2013-51 Sub-Saharan Africa 2013 3 8 918419539 89623.98 66473.52 23150.46 Lesotho Fruits Online L 9606 9.33 6.92 08-18 09-18 Sao Tome and 2013-2013-Offline 2013 3 508980977 71253.21 52848.04 18405.17 **54** Sub-Saharan Africa Fruits Н 9 7637 9.33 6.92 Principe 09-17 10-24 2013-2013-65 Sub-Saharan Africa Offline Н 2013 4 10 699358165 4477 437.20 263.33 1957344.40 1178928.41 778415.99 Rwanda Cosmetics 10-11 11-25 Central America 2013 2013-Offline 10 505716836 2013 1705 448977.65 296448.35 Haiti Cosmetics 4 437.20 263.33 745426.00 and the Caribbean 10-13 11-16 Personal 2013 2014-Offline С 12 406502997 120423.75 53252.50 **31** Sub-Saharan Africa South Sudan 2013 4 2125 81.73 56.67 173676.25 12-29 01-28 Care In [35]: Year_2014 = Year_wise[(Year_wise['Order Year'] == 2014)] Year_2014 In [36]: Ship Units Order Sales Order Order Order Unit Unit Out[36]: Order Total **Order ID Total Cost Total Profit** Region Country Item Type Channel **Priority** Date Month Date **Price** Year Quarter Sold Cost Revenue Sub-Saharan 2014-2014-87 The Gambia Baby Food Offline Μ 2014 1 2 494747245 5559 255.28 159.42 1419101.52 886215.78 532885.74 02-03 03-20 Africa Personal 2014-2014-14 Offline С 2014 1 2 832401311 4901 81.73 56.67 400558.73 277739.67 122819.06 Asia Mongolia 02-19 02-23 Care Sub-Saharan 2014-2014-Online Н 2014 2 4 616607081 6593 205.70 117.11 1356180.10 772106.23 584073.87 Senegal Cereal 04-18 05-30 Africa Sub-Saharan 2014-2014-2 59 Cosmetics Offline Н 2014 4 259353148 7215 437.20 263.33 3154398.00 1899925.95 1254472.05 Djibouti Africa 04-07 04-19 Office 2014-2014-5 341417157 1779 Russia Offline 2014 2 Europe 651.21 524.96 1158502.59 933903.84 224598.75 Supplies 05-02 05-08 2014-2014-20 Baby Food Online L 2014 2 5 819028031 7450 255.28 159.42 1901836.00 1187679.00 714157.00 Europe Norway 05-14 06-28 Sub-Saharan Sao Tome and 2014-2014-С 2 6 514321792 3 Fruits Online 2014 8102 9.33 6.92 75591.66 56065.84 19525.82 07-05 06-20 Africa Principe Australia and 2014-2014-91 Offline Н 2014 3 7 240470397 9389 47.45 31.79 445508.05 298476.31 147031.74 Australia Beverages 07-11 07-07 Oceania 2014-2014-С 3 162891.96 28 Offline 2014 7 435608613 5124 47.45 31.79 243133.80 80241.84 Europe Norway Beverages 07-30 07-18 Sub-Saharan 2014-2014-11 Clothes Offline Н 2014 3 8 939825713 4168 109.28 35.84 455479.04 149381.12 306097.92 Cape Verde 08-02 08-19 Africa Australia and 2014-2014-3 9 142278373 5270.67 23 New Zealand Fruits Online Η 2014 2187 9.33 6.92 20404.71 15134.04 09-08 10-04 Oceania Australia and 2014-2014-26 Kiribati Fruits Online M 2014 4 10 347140347 5398 9.33 6.92 50363.34 37354.16 13009.18 10-13 11-10 Oceania Australia and Federated States 2014-2014-146875.14 76 Beverages Online С 2014 4 10 217221009 9379 47.45 31.79 445033.55 298158.41 10-28 11-15 Oceania of Micronesia 2014-2014-48 Clothes Offline С 2014 10 787399423 7842 109.28 35.84 856973.76 281057.28 575916.48 Europe Macedonia 4 10-14 11-14 2014-2014-Offline С 11 986435210 **75** North America Household 2014 4 6954 668.27 502.54 4647149.58 3494663.16 1152486.42 Mexico 12-12 11-06 Year_2015 = Year_wise[(Year_wise['Order Year'] == 2015)] In [37] In [38]: Year_2015 Ship Order Units Sales Order Order Order Order Unit Unit Out[38]: Total Region Country **Item Type Order ID Total Cost Total Profit** Channel Date Month Date Sold **Price** Cost **Priority** Year Quarter Revenue 2015-2015 33 Offline Н 1 177713572 8250 668.27 502.54 5513227.50 4145955.00 1367272.50 Asia Household 2015 1 Myanmar 03-01 01-16 2015-2015-57 Offline Н 2 868214595 1244708.40 749700.51 495007.89 2015 1 2847 437.20 263.33 Europe Austria Cosmetics 02-23 03-02 Australia and Solomon 2015-2015-5 Baby Food Online С 2015 2 547995746 2974 255.28 159.42 759202.72 474115.08 285087.64 1 02-21 Islands 02-04 Oceania Sub-Saharan 2015-2015-69 Offline L 2 4 610425555 109.28 802333.76 263137.28 539196.48 Clothes 2015 7342 35.84 Madagascar Africa 04-25 05-28 Sub-Saharan 2015-2015-17 Offline С 2015 2 4 519820964 5430 257653.50 172619.70 85033.80 47.45 31.79 Cameroon Beverages 04-01 04-18 Africa 2015-2015-Н 3 7 860673511 159.42 324971.44 202941.66 122029.78 21 Baby Food Online 2015 1273 255.28 Europe Portugal 07-31 09-03 Sub-Saharan Republic of the Personal 2015-2015-8 Offline M 2015 3 7 770463311 6070 81.73 496101.10 343986.90 152114.20 56.67 08-25 Congo 07-14 Africa Care Personal 2015-2015-North America Offline M 3 7 559427106 471336.91 326815.89 144521.02 98 2015 5767 81.73 56.67 Mexico 07-30 08-08 Care Middle East and 2015-2015-Libya 71 2015 3 8 816200339 673 9.33 6.92 6279.09 4657.16 1621.93 Fruits Online L 08-14 09-30 North Africa Australia and Office 2015-2015-32 С 10 158535134 1904138.04 1534983.04 369155.00 Online 2015 4 2924 651.21 524.96 Australia Oceania Supplies 10-27 11-25 2015-2015-Online Н 2015 4 11 223359620 5930 109.28 648030.40 212531.20 435499.20 44 Clothes 35.84 Asia Myanmar 11-18 11-14 Year_2016 = Year_wise[(Year_wise['Order Year'] == 2016)] In [39] In [40]: Year_2016 Order Unit Out[40]: Sales Order Order Order Order Ship Units Unit Total **Order ID Total Cost Total Profit** Region **Item Type** Country Channel Month Date **Price** Cost Revenue **Priority** Date Year Quarter Sold 2016-2016 Sub-Saharan Africa Offline 3 902102267 85223.58 Н 117.11 197883.40 112659.82 45 Comoros Cereal 2016 1 962 205.70 03-29 04-29 Personal 2016-2016-5 740147912 287316.90 24 Moldova Online 2016 2 5070 81.73 56.67 414371.10 127054.20 Europe 05-07 05-10 Care Sierra 2016-2016 Offline С 2016 2 6 728815257 1485 228779.10 135031.05 93748.05 97 Sub-Saharan Africa Vegetables 154.06 90.93 Leone 06-01 06-29 Central America and 2016-2016 2 6 795490682 122686.50 22 Honduras Online 2016 2225 152.58 97.44 339490.50 216804.00 Snacks the Caribbean 06-30 07-26 Central America and 2016-2016 67 3 Offline M 7 807025039 5498 197048.32 403773.12 Belize Clothes 2016 109.28 35.84 600821.44 09-07 the Caribbean 07-25 2016-2016-89 Offline С 221117.00 148141.40 2016 4 10 345718562 4660 47.45 31.79 72975.60 Europe Slovenia Beverages 10-23 11-25 Middle East and 2016-2016 2836990.80 1708748.37 1128242.43 82 Н 4 11 286959302 6489 Online 2016 437.20 263.33 Iran Cosmetics 11-15 12-08 North Africa 2016-2016-16 Offline Sri Lanka M 2016 4 11 419123971 6952 437.20 263.33 3039414.40 1830670.16 1208744.24 Asia Cosmetics 11-19 12-18 Sierra Office 2016-2016-Offline Н 4 12 621386563 617347.08 497662.08 119685.00 90 Sub-Saharan Africa 2016 948 651.21 524.96 Supplies 12-06 12-14 Leone 2016-2016-46 С 3876652.40 2334947.11 1541705.29 Online 2016 4 12 331438481 8867 437.20 263.33 Europe Iceland Cosmetics 12-31 12-31 Year_2017 = Year_wise[(Year_wise['Order Year'] == 2017)] Year_2017 In [42]: Sales Order Order Order Order Ship Units Unit Unit Out[42]: Order Total Order ID **Item Type Total Cost Total Profit** Region Country **Date Price** Cost Channel **Priority** Date Year Quarter Month Sold Revenue The 2017-2017-Sub-Saharan Africa 1 825304400 4767 37 Online Μ 2017 1 421.89 364.69 2011149.63 1738477.23 272672.40 Meat Gambia 01-14 01-23 2017-2017-Asia Bangladesh 1 187310731 8263 109.28 902980.64 606834.72 12 Clothes Online L 2017 1 35.84 296145.92 01-13 03-01 2017-2017-713942.88 1117953.66 Sub-Saharan Africa Online M 2017 1 2 756274640 7327 152.58 97.44 404010.78 34 Djibouti Snacks 02-25 02-25 Central America and 2017-2017-Offline Н 2 522840487 5997054.98 4509793.96 1487261.02 13 Honduras Household 2017 1 8974 668.27 502.54 the Caribbean 02-08 02-13 Personal 2017-2017-Sub-Saharan Africa Н 3 699285638 170860.05 40 Online 2017 1 3015 81.73 56.67 246415.95 75555.90 Niger Care 03-11 03-28 2017-2017-Н 2 5 555990016 8656 205.70 117.11 1780539.20 1013704.16 766835.04 Sub-Saharan Africa Djibouti Cereal Online 2017 73 05-20 06-17 2017-2017-477943.95 25 Н 2 Cosmetics Online 2017 5 898523128 1815 437.20 263.33 793518.00 315574.05 Europe France 05-22 06-05 Central America and Personal 2017-2017-Costa Rica Offline 2 6409 363198.03 35 2017 5 456767165 81.73 56.67 523807.57 160609.54 the Caribbean Care 05-08 05-21

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