

1. Checking if order id is primary key or not?

| | Order ID | numeroforders |
|----|--------------|---------------|
| 1 | AE-2011-9160 | 2 |
| 2 | AE-2013-1130 | 2 |
| 3 | AE-2013-1530 | 2 |
| 4 | AE-2014-3830 | 6 |
| 5 | AG-2011-1390 | 2 |
| 6 | AG-2011-4560 | 3 |
| 7 | AG-2011-8180 | 5 |
| 8 | AG-2011-9890 | 3 |
| 9 | AG-2012-170 | 2 |
| 10 | AG-2012-1940 | 2 |
| 11 | AG-2012-2220 | 3 |
| 12 | AG-2012-2430 | 3 |
| 13 | AG-2012-3190 | 2 |
| 14 | AG-2012-4060 | 5 |
| 15 | AG-2012-4630 | 10 |

For one order ID there are multiple orders, so this cannot be a primary key

2. Checking if [row id] is primary key or not

| Row ID | Order ID | numeroforders |
|--------|----------|---------------|
|--------|----------|---------------|

Since there are no duplicates here we can say there [Row ID] is primary key

3. Checking if the dates are correct and appropriate?

Row ID | Order ID | Order Date | Ship Date | Ship Mode | Customer ID | Customer Name | Segment | City | State | Country | Postal Code | Market | Region

There are no such rows where shipping date is more than order date so dates are all correct

4. How many distinct modes of shipping are available?

| | Ship Mode |
|---|----------------|
| 1 | First Class |
| 2 | Same Day |
| 3 | Standard Class |
| 4 | Second Class |

5. Min max number of days for different shipping modes?

| | Ship Mode | mindays | maxdays |
|---|----------------|---------|---------|
| 1 | First Class | 1 | 3 |
| 2 | Same Day | 0 | 1 |
| 3 | Standard Class | 4 | 7 |
| 4 | Second Class | 2 | 5 |

6. Find daily, monthly, yearly, number of products sold

-- Lists the Daily Number of Products Sold

| | Day | TotalItemsSold |
|----|-------------------------|----------------|
| 1 | 2011-01-01 00:00:00.000 | 19 |
| 2 | 2011-01-02 00:00:00.000 | 1 |
| 3 | 2011-01-03 00:00:00.000 | 48 |
| 4 | 2011-01-04 00:00:00.000 | 52 |
| 5 | 2011-01-05 00:00:00.000 | 24 |
| 6 | 2011-01-06 00:00:00.000 | 23 |
| 7 | 2011-01-07 00:00:00.000 | 68 |
| 8 | 2011-01-08 00:00:00.000 | 46 |
| 9 | 2011-01-09 00:00:00.000 | 30 |
| 10 | 2011-01-10 00:00:00.000 | 67 |

-- Lists the Monthly Number of Products Sold

| | Month | TotalItemsSold |
|----|-------|----------------|
| 1 | 1 | 8843 |
| 2 | 2 | 7281 |
| 3 | 3 | 10481 |
| 4 | 4 | 10552 |
| 5 | 5 | 13042 |
| 6 | 6 | 18119 |
| 7 | 7 | 10984 |
| 8 | 8 | 17611 |
| 9 | 9 | 20542 |
| 10 | 10 | 16049 |
| 11 | 11 | 22494 |
| 12 | 12 | 22314 |

-- Lists the Yearly Number of Products Sold

| | Year | TotalItemsSold |
|---|------|----------------|
| 1 | 2011 | 31443 |
| 2 | 2012 | 38111 |
| 3 | 2013 | 48136 |
| 4 | 2014 | 60622 |

7. Find daily, monthly, yearly, number of customers who placed orders

-- Lists the Daily Number of Customers

| | Day | TotalCustomers |
|----|-------------------------|----------------|
| 1 | 2011-01-01 00:00:00.000 | 4 |
| 2 | 2011-01-02 00:00:00.000 | 1 |
| 3 | 2011-01-03 00:00:00.000 | 11 |
| 4 | 2011-01-04 00:00:00.000 | 9 |
| 5 | 2011-01-05 00:00:00.000 | 4 |
| 6 | 2011-01-06 00:00:00.000 | 6 |
| 7 | 2011-01-07 00:00:00.000 | 11 |
| 8 | 2011-01-08 00:00:00.000 | 6 |
| 9 | 2011-01-09 00:00:00.000 | 3 |
| 10 | 2011-01-10 00:00:00.000 | 11 |

-- Lists the Monthly Number of Customers

| | Month | TotalCustomers |
|----|-------|----------------|
| 1 | 1 | 821 |
| 2 | 2 | 736 |
| 3 | 3 | 878 |
| 4 | 4 | 854 |
| 5 | 5 | 946 |
| 6 | 6 | 1151 |
| 7 | 7 | 874 |
| 8 | 8 | 1134 |
| 9 | 9 | 1174 |
| 10 | 10 | 980 |
| 11 | 11 | 1194 |
| 12 | 12 | 1168 |

-- Lists the Yearly Number of Customers

| | Year | TotalCustomers |
|---|------|----------------|
| 1 | 2011 | 1309 |
| 2 | 2012 | 1373 |
| 3 | 2013 | 1458 |
| 4 | 2014 | 1511 |

8. Find daily, monthly, yearly, revenue and profit

-- Lists the Daily Revenue and Profit

| | Day | TotalSales | TotalProfit |
|----|-------------------------|------------|-------------|
| 1 | 2011-01-01 00:00:00.000 | 808.56 | 198.87 |
| 2 | 2011-01-02 00:00:00.000 | 314.22 | 3.12 |
| 3 | 2011-01-03 00:00:00.000 | 4503.54 | 184.6 |
| 4 | 2011-01-04 00:00:00.000 | 2808.87 | 635.12 |
| 5 | 2011-01-05 00:00:00.000 | 3662.31 | 1053.37 |
| 6 | 2011-01-06 00:00:00.000 | 622.54 | 86.13 |
| 7 | 2011-01-07 00:00:00.000 | 7123.02 | 1541.14 |
| 8 | 2011-01-08 00:00:00.000 | 6293.26 | -630.65 |
| 9 | 2011-01-09 00:00:00.000 | 813.75 | -117.63 |
| 10 | 2011-01-10 00:00:00.000 | 6794.18 | 1444 |

-- Lists the Monthly Revenue and Profit

| | Month | TotalSales | TotalProfit |
|----|-------|------------|-------------|
| 1 | 1 | 675133.67 | 73535.38 |
| 2 | 2 | 543739.38 | 70932.2 |
| 3 | 3 | 770500.94 | 94087.52 |
| 4 | 4 | 698561.21 | 73513.63 |
| 5 | 5 | 904012.34 | 104509.78 |
| 6 | 6 | 1269716.75 | 147079.42 |
| 7 | 7 | 749381.84 | 78070.09 |
| 8 | 8 | 1293833.17 | 151854.11 |
| 9 | 9 | 1437380.11 | 170438.18 |
| 10 | 10 | 1168184.39 | 157269.36 |
| 11 | 11 | 1551277.34 | 175449.48 |
| 12 | 12 | 1580780.77 | 170718.13 |

-- Lists the Yearly Revenue and Profit

| | Year | TotalSales | TotalProfit |
|---|------|------------|-------------|
| 1 | 2011 | 2259450.9 | 248940.81 |
| 2 | 2012 | 2677438.69 | 307415.28 |
| 3 | 2013 | 3405746.45 | 406935.23 |
| 4 | 2014 | 4299865.87 | 504165.97 |

9. Find daily, monthly, yearly, ARPC(average revenue per customer)

-- Lists the Daily Average Revenue Per Customer

| | Day | ARPC |
|----|-------------------------|---------|
| 1 | 2011-01-01 00:00:00.000 | 49.72 |
| 2 | 2011-01-02 00:00:00.000 | 3.12 |
| 3 | 2011-01-03 00:00:00.000 | 16.78 |
| 4 | 2011-01-04 00:00:00.000 | 70.57 |
| 5 | 2011-01-05 00:00:00.000 | 263.34 |
| 6 | 2011-01-06 00:00:00.000 | 14.35 |
| 7 | 2011-01-07 00:00:00.000 | 140.1 |
| 8 | 2011-01-08 00:00:00.000 | -105.11 |
| 9 | 2011-01-09 00:00:00.000 | -39.21 |
| 10 | 2011-01-10 00:00:00.000 | 131.27 |

-- Lists the Monthly Average Revenue Per Customer

| | Month | ARPC |
|----|-------|--------|
| 1 | 1 | 89.57 |
| 2 | 2 | 96.38 |
| 3 | 3 | 107.16 |
| 4 | 4 | 86.08 |
| 5 | 5 | 110.48 |
| 6 | 6 | 127.78 |
| 7 | 7 | 89.33 |
| 8 | 8 | 133.91 |
| 9 | 9 | 145.18 |
| 10 | 10 | 160.48 |
| 11 | 11 | 146.94 |
| 12 | 12 | 146.16 |

-- Lists the Yearly Average Revenue Per Customer

| | Year | ARPC |
|---|------|--------|
| 1 | 2013 | 279.11 |
| 2 | 2014 | 333.66 |
| 3 | 2011 | 190.18 |
| 4 | 2012 | 223.9 |

Over View of Data

--Daily View

| | Day | Customers | ProductsSold | TotalProfit | ARPC |
|----|-------------------------|-----------|--------------|-------------|---------|
| 1 | 2011-01-01 00:00:00.000 | 4 | 19 | 198.87 | 49.72 |
| 2 | 2011-01-02 00:00:00.000 | 1 | 1 | 3.12 | 3.12 |
| 3 | 2011-01-03 00:00:00.000 | 11 | 48 | 184.6 | 16.78 |
| 4 | 2011-01-04 00:00:00.000 | 9 | 52 | 635.12 | 70.57 |
| 5 | 2011-01-05 00:00:00.000 | 4 | 24 | 1053.37 | 263.34 |
| 6 | 2011-01-06 00:00:00.000 | 6 | 23 | 86.13 | 14.35 |
| 7 | 2011-01-07 00:00:00.000 | 11 | 68 | 1541.14 | 140.1 |
| 8 | 2011-01-08 00:00:00.000 | 6 | 46 | -630.65 | -105.11 |
| 9 | 2011-01-09 00:00:00.000 | 3 | 30 | -117.63 | -39.21 |
| 10 | 2011-01-10 00:00:00.000 | 11 | 67 | 1444 | 131.27 |

-- Monthly View

| | Month | Customers | ProductsSold | TotalProfit | ARPC |
|----|-------|-----------|--------------|-------------|--------|
| 1 | 1 | 821 | 8843 | 73535.38 | 89.57 |
| 2 | 2 | 736 | 7281 | 70932.2 | 96.38 |
| 3 | 3 | 878 | 10481 | 94087.52 | 107.16 |
| 4 | 4 | 854 | 10552 | 73513.63 | 86.08 |
| 5 | 5 | 946 | 13042 | 104509.78 | 110.48 |
| 6 | 6 | 1151 | 18119 | 147079.42 | 127.78 |
| 7 | 7 | 874 | 10984 | 78070.09 | 89.33 |
| 8 | 8 | 1134 | 17611 | 151854.11 | 133.91 |
| 9 | 9 | 1174 | 20542 | 170438.18 | 145.18 |
| 10 | 10 | 980 | 16049 | 157269.36 | 160.48 |
| 11 | 11 | 1194 | 22494 | 175449.48 | 146.94 |
| 12 | 12 | 1168 | 22314 | 170718.13 | 146.16 |

-- Yearly View

| | Year | Customers | ProductsSold | TotalProfit | ARPC |
|---|------|-----------|--------------|-------------|--------|
| 1 | 2013 | 1458 | 48136 | 406935.23 | 279.11 |
| 2 | 2014 | 1511 | 60622 | 504165.97 | 333.66 |
| 3 | 2011 | 1309 | 31443 | 248940.81 | 190.18 |
| 4 | 2012 | 1373 | 38111 | 307415.28 | 223.9 |