

Deliverables:

Soft drink data (10 points)

- 1) A screenshot of the decomposed time series with date and time in RM: The screenshot must clearly show original value, trend, seasonal, remainder components, and seasonally adjusted series of at least the first 20 records (3 points).

Result History: ExampleSet (Classic Decomposition)

Open in: Turbo Prep, Auto Model

Filter (64 / 64 examples): all

Row No.	Sales	Sales_Trend	Sales_Seasonal	Sales_Remainder
1	1807.370	?	-443.978	?
2	2355.320	?	395.194	?
3	2591.830	2215.449	190.408	185.973
4	2236.390	2151.979	-141.624	226.036
5	1549.140	2051.974	-443.978	-58.856
6	2105.790	1956.237	395.194	-245.641
7	2041.320	1969.480	190.408	-118.568
8	2021.010	2045.241	-141.624	117.393
9	1870.460	2100.426	-443.978	214.011
10	2390.560	2123.243	395.194	-127.876
11	2198.030	2134.436	190.408	-126.814
12	2046.830	2144.384	-141.624	44.071
13	1934.190	2152.744	-443.978	225.424
14	2406.410	2179.714	395.194	-168.498
15	2249.060	2238.162	190.408	-179.511
16	2211.560	2332.273	-141.624	20.912
17	2237.050	2457.339	-443.978	223.689
18	2856.430	2580.374	395.194	-119.138

ExampleSet (64 examples, 0 special attributes, 4 regular attributes)

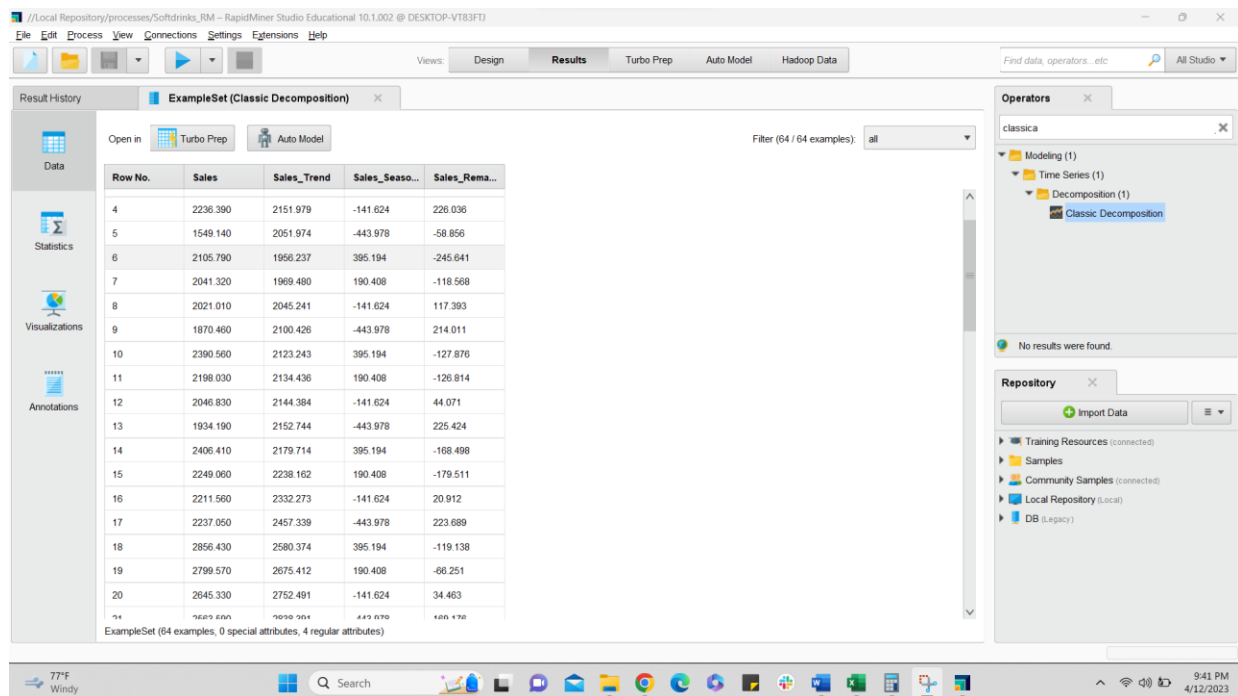
Operators: classica

- Modeling (1)
 - Time Series (1)
 - Decomposition (1)
 - Classic Decomposition

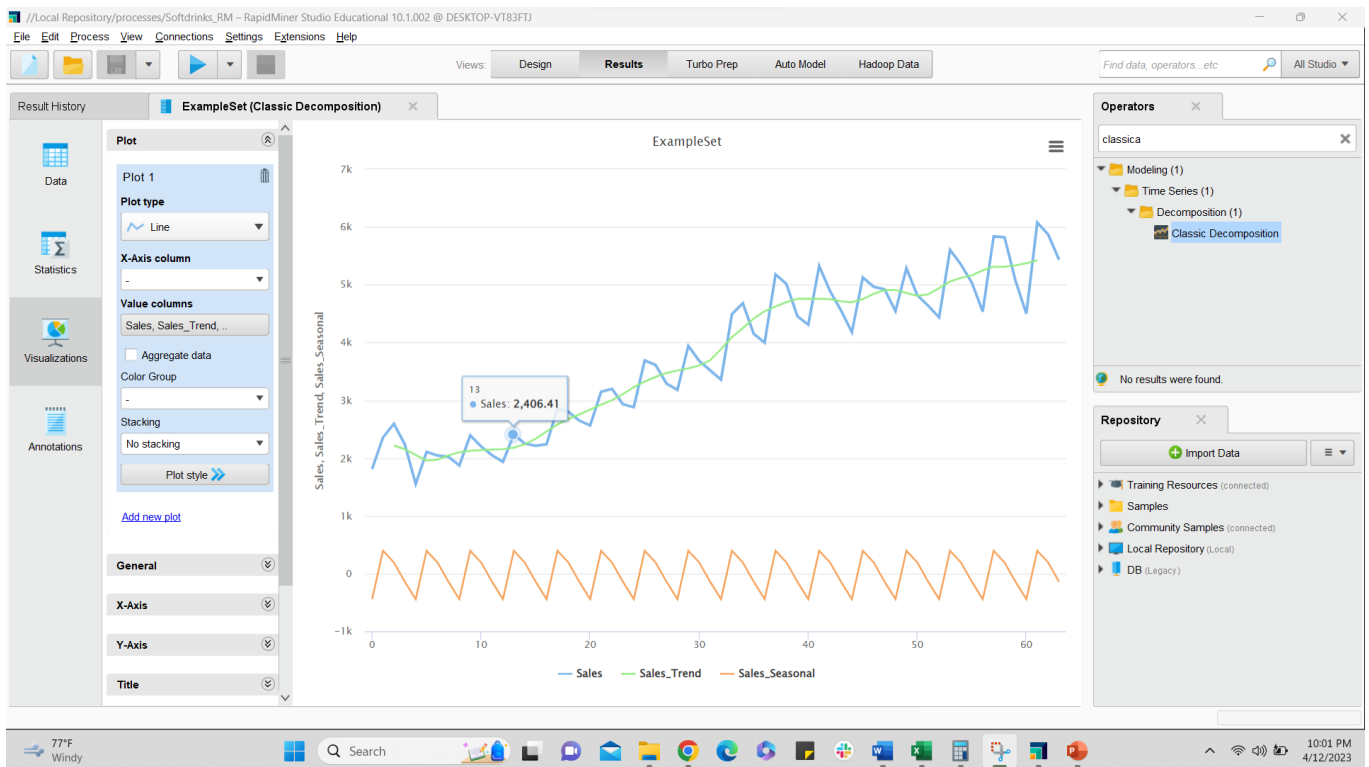
No results were found.

Repository: Import Data

- Training Resources (connected)
- Samples
- Community Samples (connected)
- Local Repository (Local)
- DB (Legacy)



2) A screenshot of an appropriate visual in RM with date and time to display the original value, the trend (or trend-cycle) component, and the seasonal component (3 points)

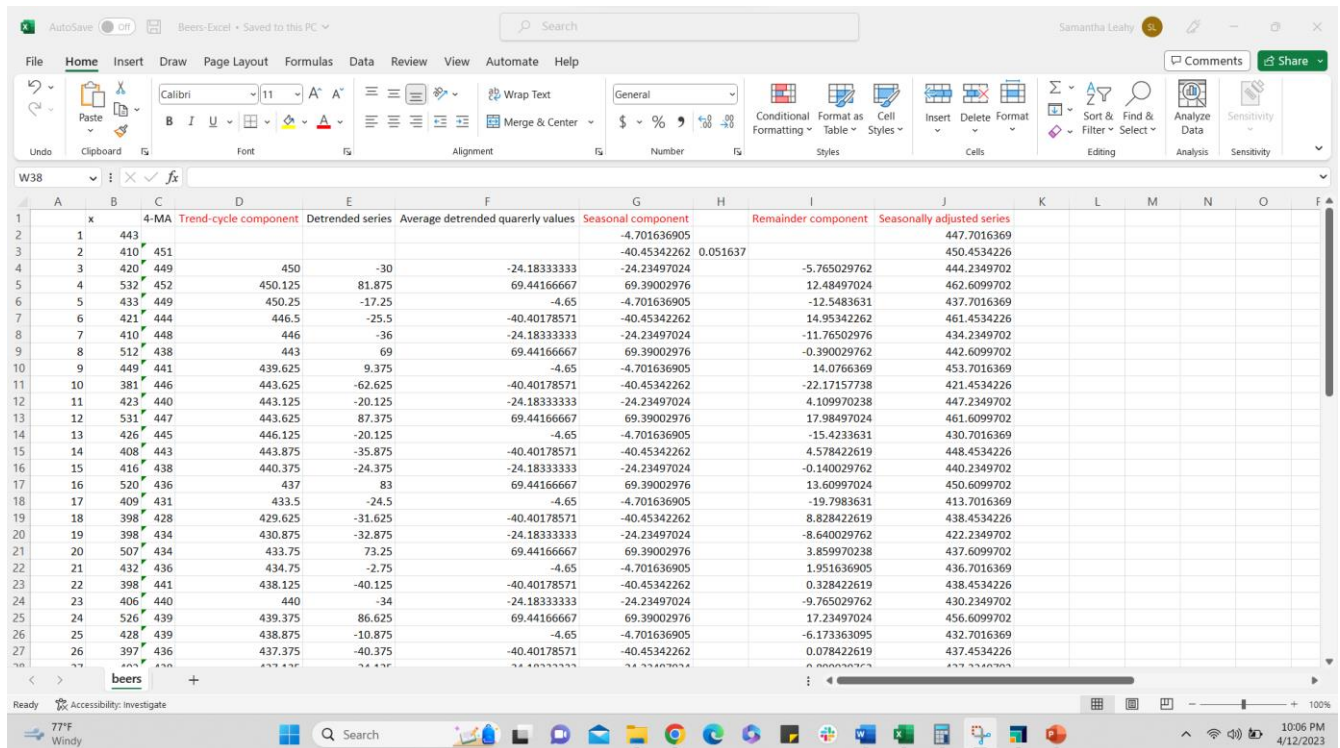


- 3) A brief discussion about this series' patterns: Your discussion must include trend and seasonality (cycle is optional); you must use the description that you observe from the visual above to justify your discussion (e.g., this time series has a decreasing trend because). (4 points: 2 points for each pattern; 1 point for identifying each correct pattern and 1 point for your justification; for example, if you identify a correct pattern but without an appropriate justification, you will only 1 point)

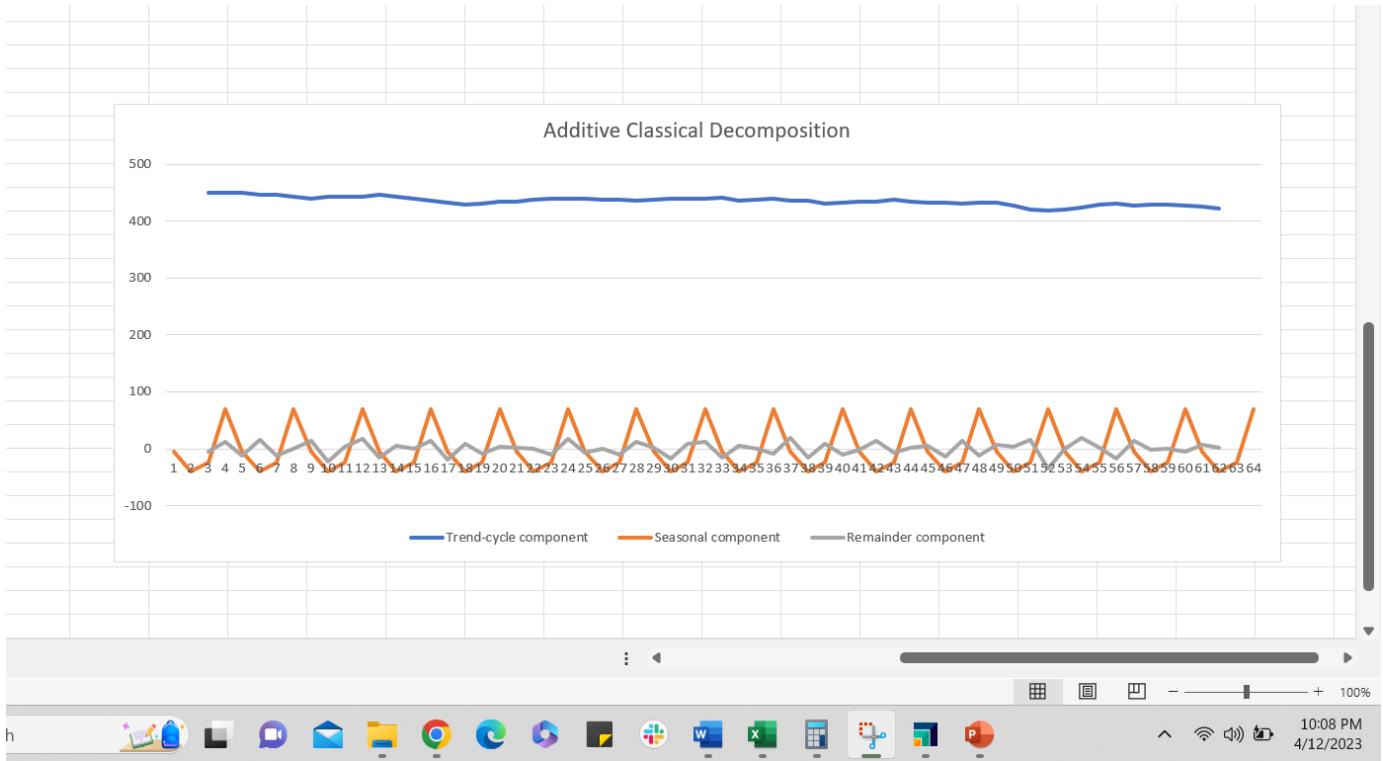
This time series has an increasing trend. This trend is shown by the green line and would be considered a long-term increasing trend. It appears the seasonal pattern, shown by the orange line, is a repeating consistent pattern.

Beers data (10 points)

- 1) A screenshot of the decomposed time series with date and time in Excel: The screenshot must clearly show original value, trend-cycle component, seasonal component, remainder component, and seasonally adjusted series of at least the first 20 records (3 points).



- 2) A screenshot of an appropriate visual in Excel with date and time to display the original value, the trend (or trend-cycle) component and the seasonal component (3 points)



- 3) A brief discussion about this series' patterns: Your discussion must include trend and seasonality (cycle is optional); you must use the description that you observe from the visual above to justify your discussion (e.g., this time series has a decreasing trend because). (4 points: 2 points for each pattern; 1 point for identifying each correct pattern and 1 point for your justification; for example, if you identify a correct pattern but without an appropriate justification, you will only 1 point)

Based on the visual, it appears this time series has a slower decreasing trend cycle because of the value of sales. The seasonal component, the orange line, appears to be a consistent repeating pattern.

Summary Question (2 bonus points): Briefly discuss how visualization and decomposition help you identify a time series' patterns. You must incorporate your experience from this lab exercise into your discussion.