## Phase 3: Development Part 1 - Loading and Pre-processing the Dataset

In this Initial Phase, We've wrapped up the first leg of our project journey. The dataset has been loaded and gone through a thorough process of cleaning and tidying up. We've squashed any pesky errors, handled missing data like a pro, and ensured everything is in tip-top shape. Our data is now sparkling clean and ready for the next exciting phase. We've set the stage for some serious data analysis, and I can't wait to dig deeper into what our data has to tell us. So, onwards and upwards!

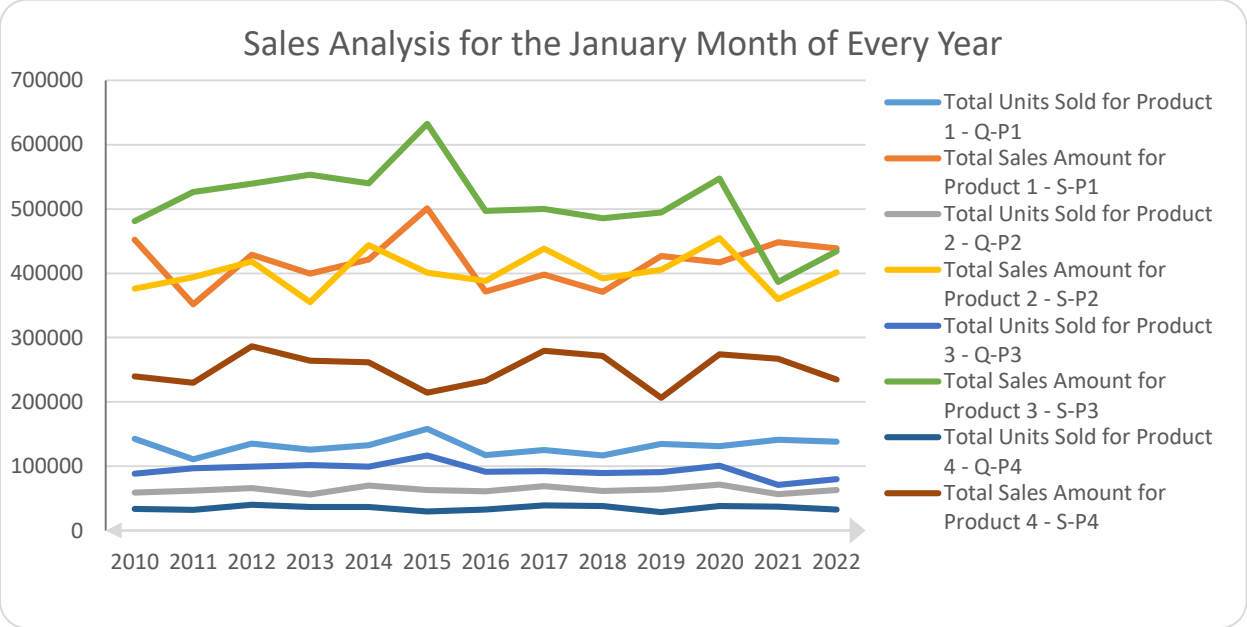
- ✓ Sample Analysis have been done for the above data set.

We've conducted a sample analysis for the dataset provided, focusing on 'Sales Analysis for Each Month of Every Year.' This preliminary analysis served as a crucial step to ensure the accuracy and reliability of the data as we prepare for the upcoming phases of our project. By examining sales data for each month across multiple years, we've verified that the dataset is in good shape and ready for more in-depth analysis.

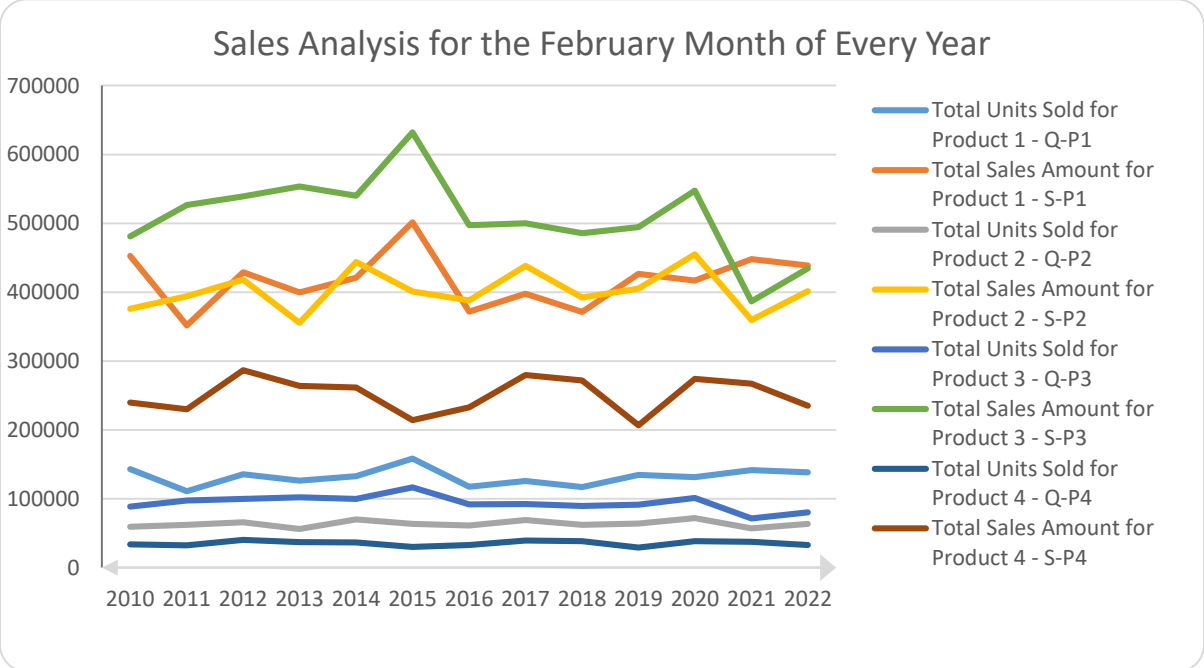
**Sales Analysis for the Each Month of Every Year:**

In this we have analysed and visualised the sales and quantity for every month to find the peak reach to increase the revenue for the upcoming years.

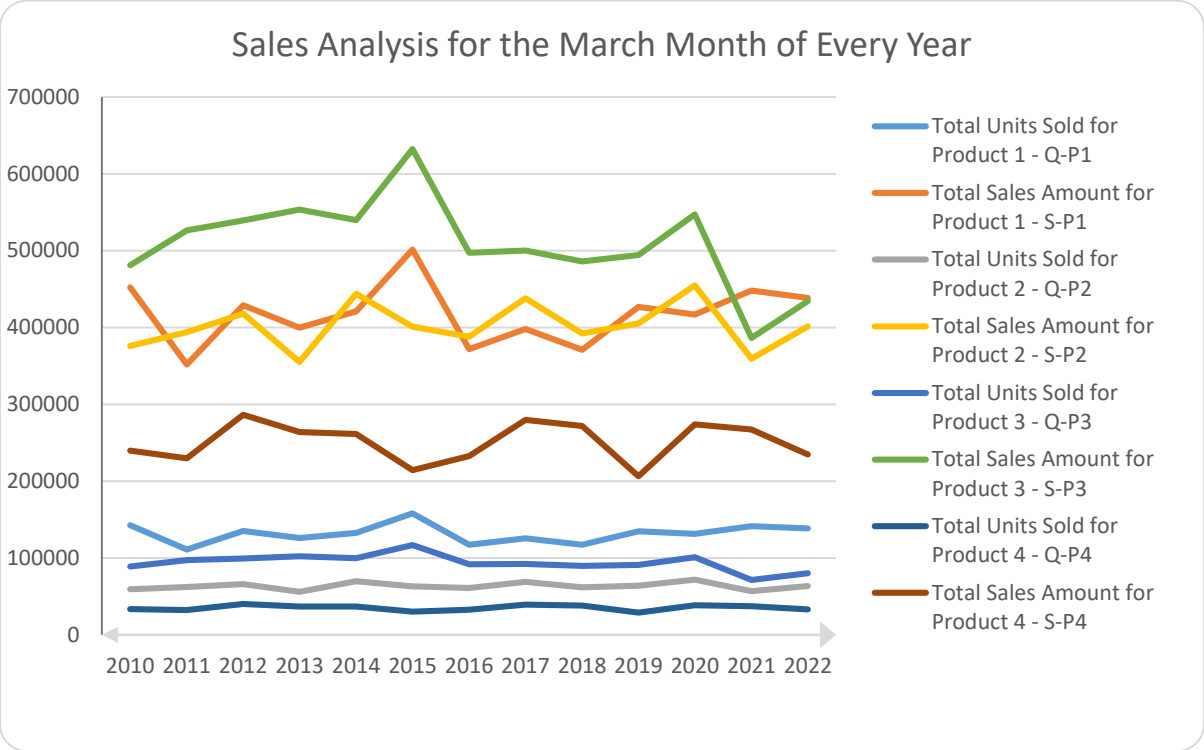
1. January



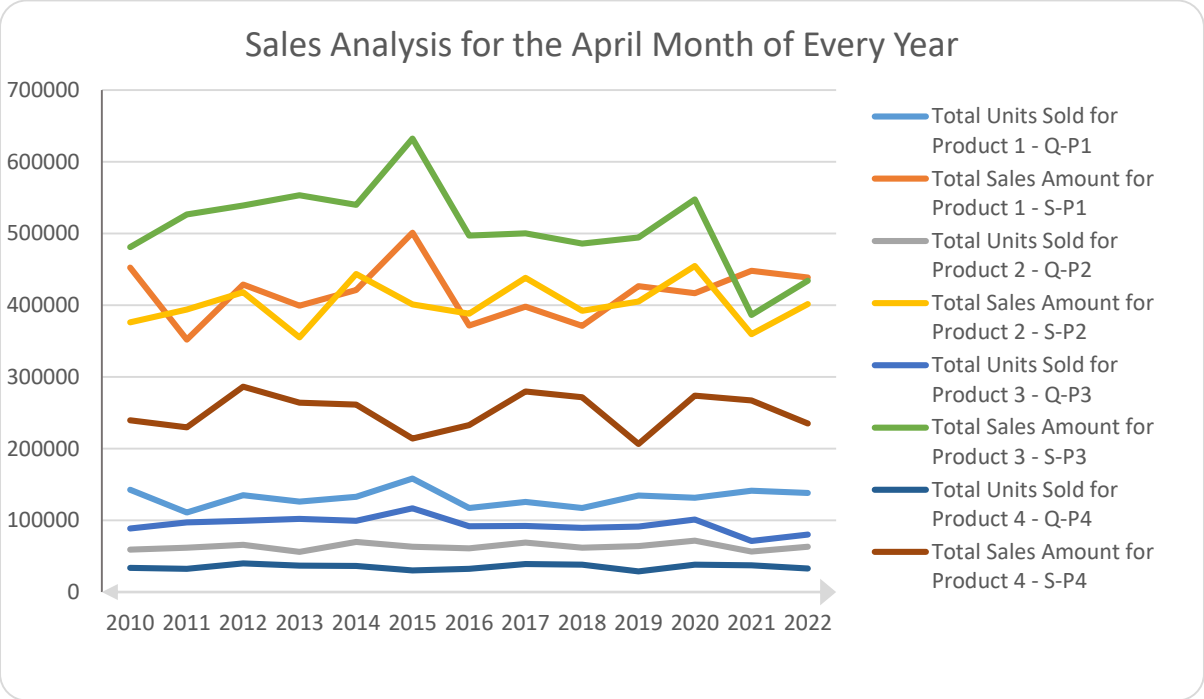

2. February



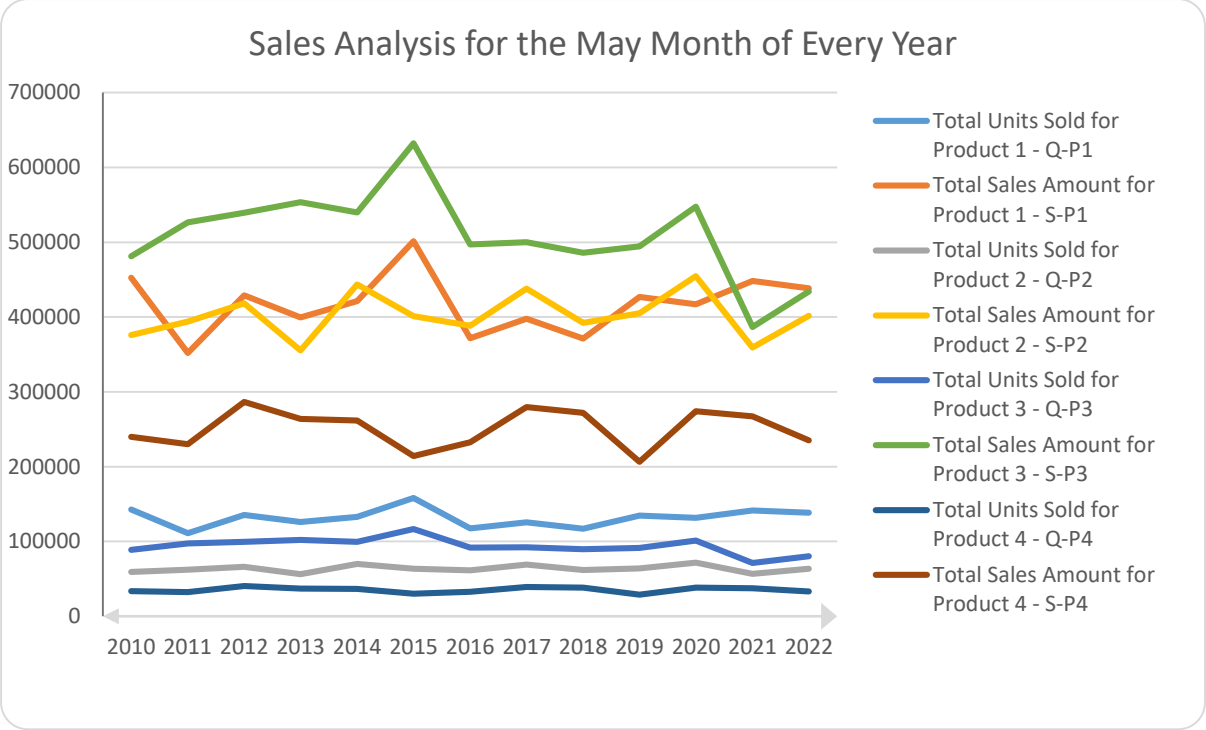
3. March



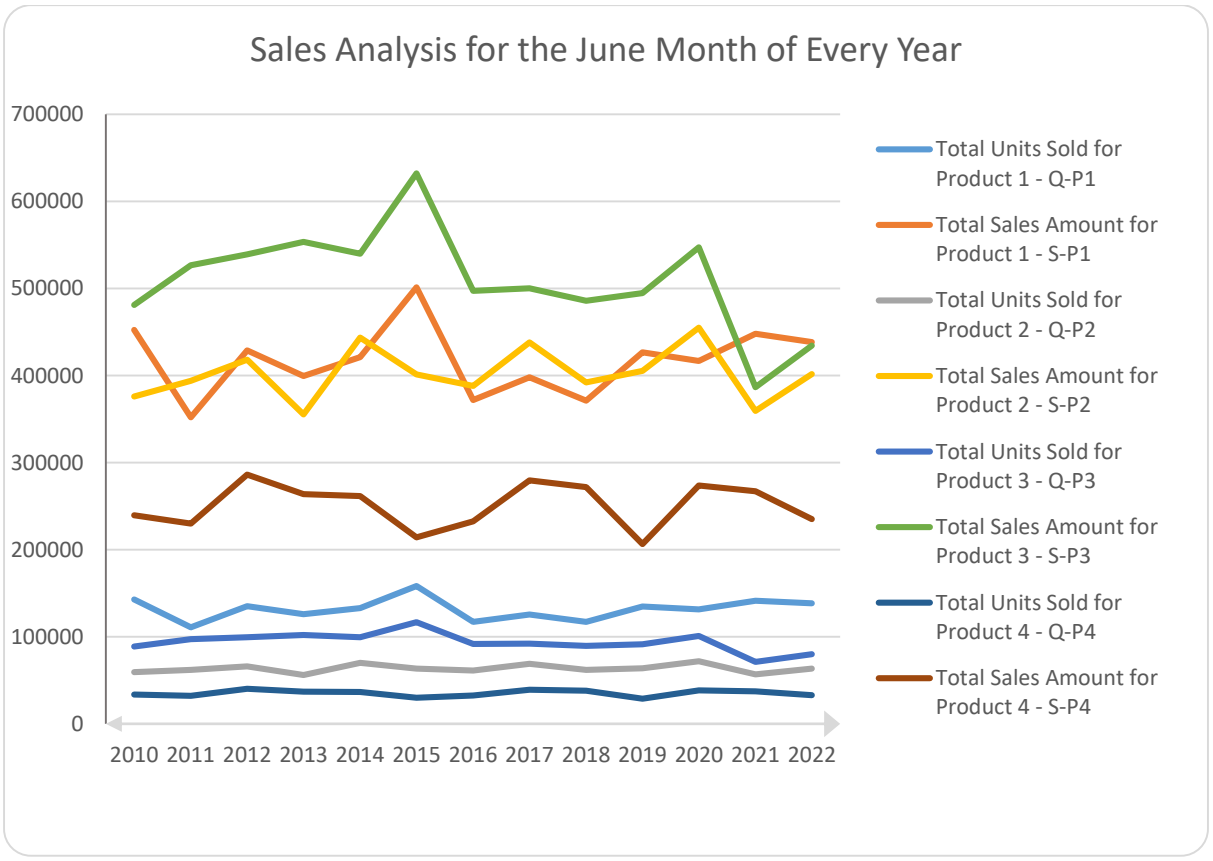

4. April



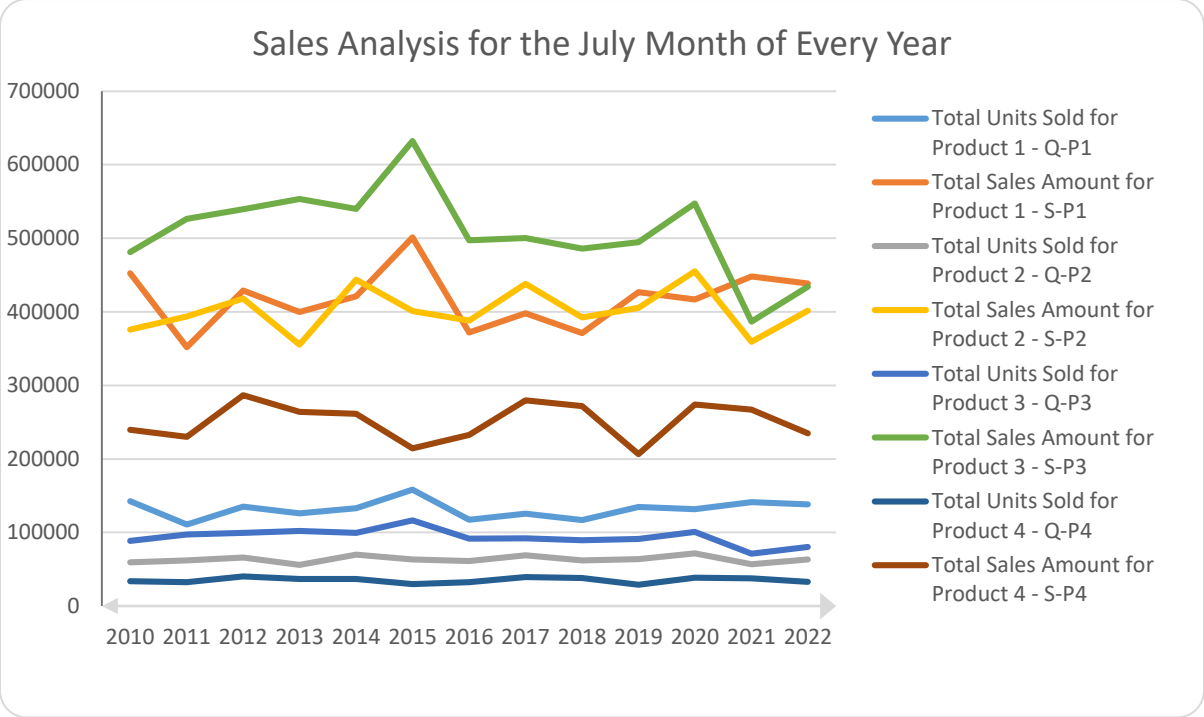

5. May


Sales Analysis for the May Month of Every Year
700000
600000
500000
400000
300000
200000
100000
0
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Total Units Sold for Product 1 - Q-P1
Total Sales Amount for Product 1 - S-P1
Total Units Sold for Product 2 - Q-P2
Total Sales Amount for Product 2 - S-P2
Total Units Sold for Product 3 - Q-P3
Total Sales Amount for Product 3 - S-P3
Total Units Sold for Product 4 - Q-P4
Total Sales Amount for Product 4 - S-P4

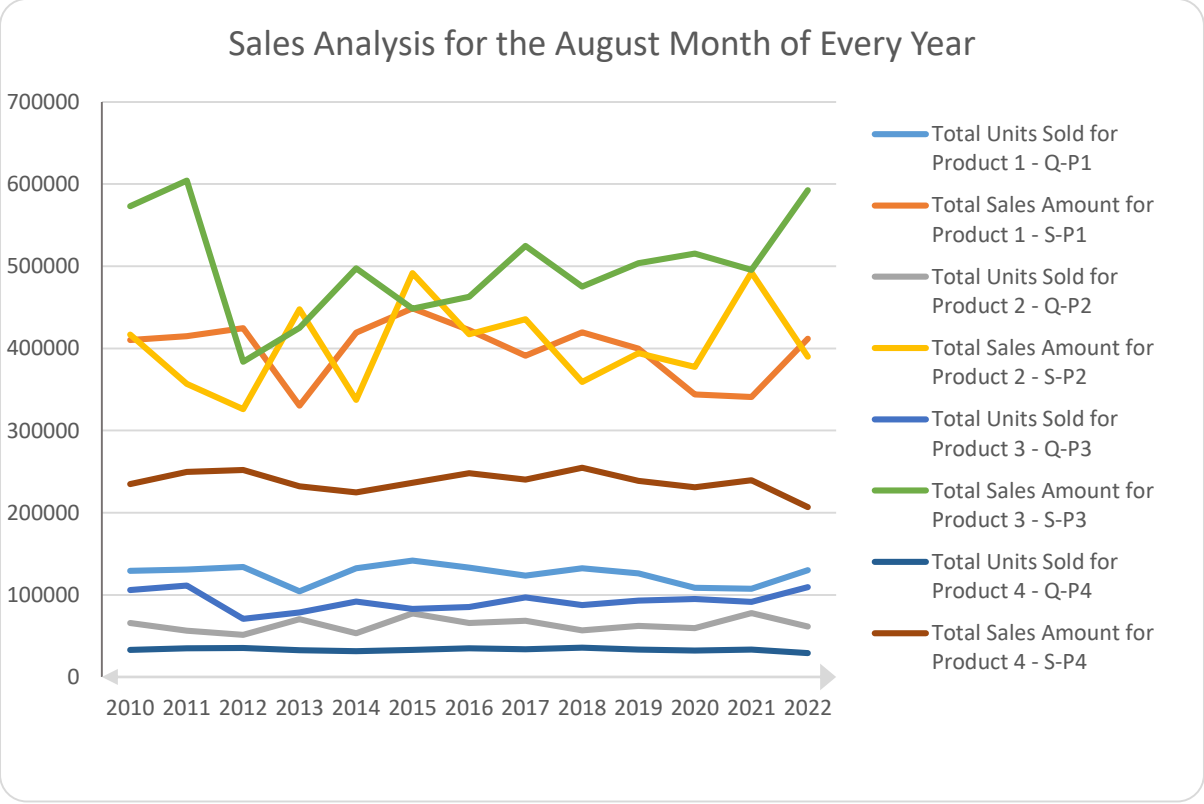
6. June


Sales Analysis for the June Month of Every Year
700000
600000
500000
400000
300000
200000
100000
0
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Total Units Sold for Product 1 - Q-P1
Total Sales Amount for Product 1 - S-P1
Total Units Sold for Product 2 - Q-P2
Total Sales Amount for Product 2 - S-P2
Total Units Sold for Product 3 - Q-P3
Total Sales Amount for Product 3 - S-P3
Total Units Sold for Product 4 - Q-P4
Total Sales Amount for Product 4 - S-P4

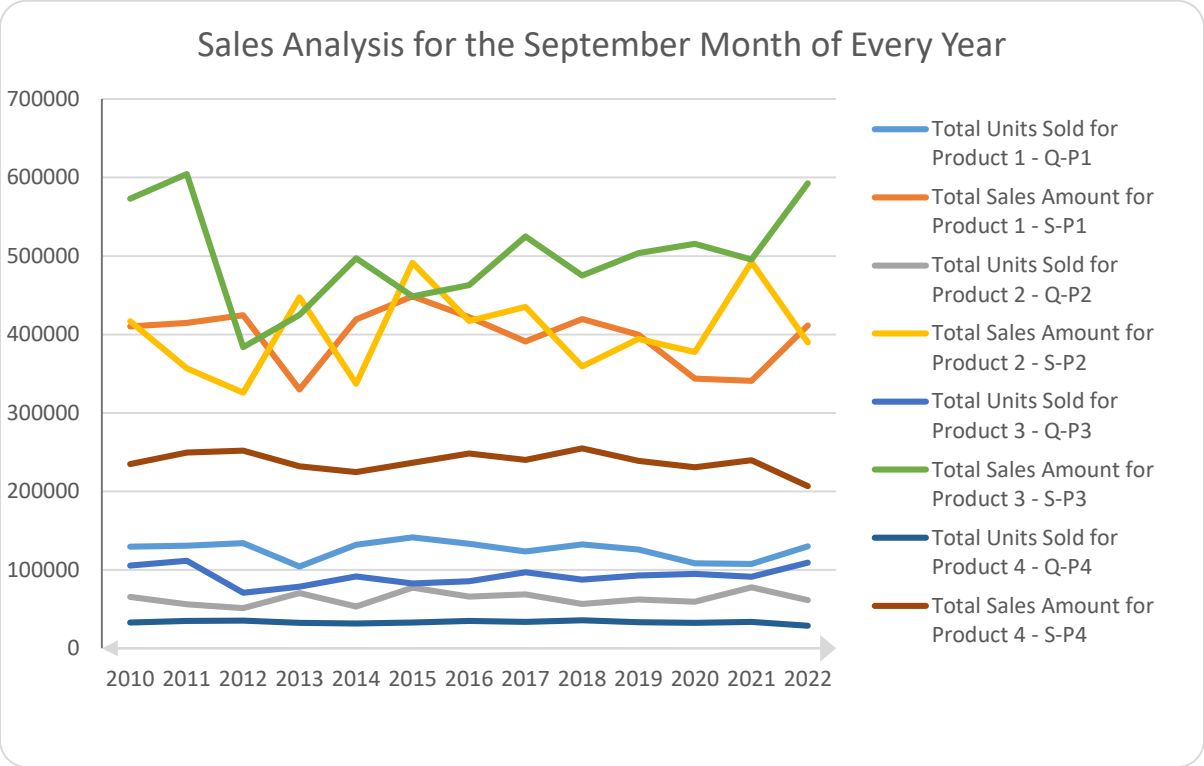
7. July


Sales Analysis for the July Month of Every Year
700000
600000
500000
400000
300000
200000
100000
0
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Total Units Sold for Product 1 - Q-P1
Total Sales Amount for Product 1 - S-P1
Total Units Sold for Product 2 - Q-P2
Total Sales Amount for Product 2 - S-P2
Total Units Sold for Product 3 - Q-P3
Total Sales Amount for Product 3 - S-P3
Total Units Sold for Product 4 - Q-P4
Total Sales Amount for Product 4 - S-P4

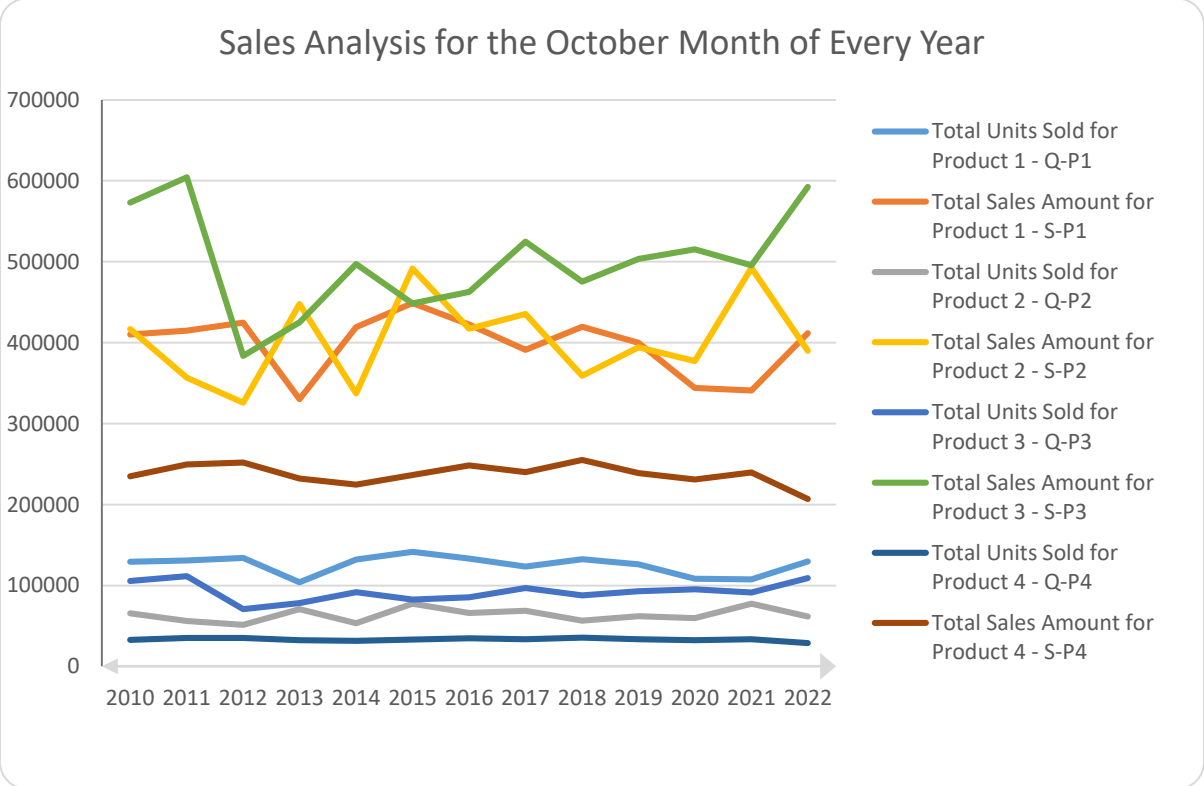
8. August


Sales Analysis for the August Month of Every Year
700000
600000
500000
400000
300000
200000
100000
0
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Total Units Sold for Product 1 - Q-P1
Total Sales Amount for Product 1 - S-P1
Total Units Sold for Product 2 - Q-P2
Total Sales Amount for Product 2 - S-P2
Total Units Sold for Product 3 - Q-P3
Total Sales Amount for Product 3 - S-P3
Total Units Sold for Product 4 - Q-P4
Total Sales Amount for Product 4 - S-P4

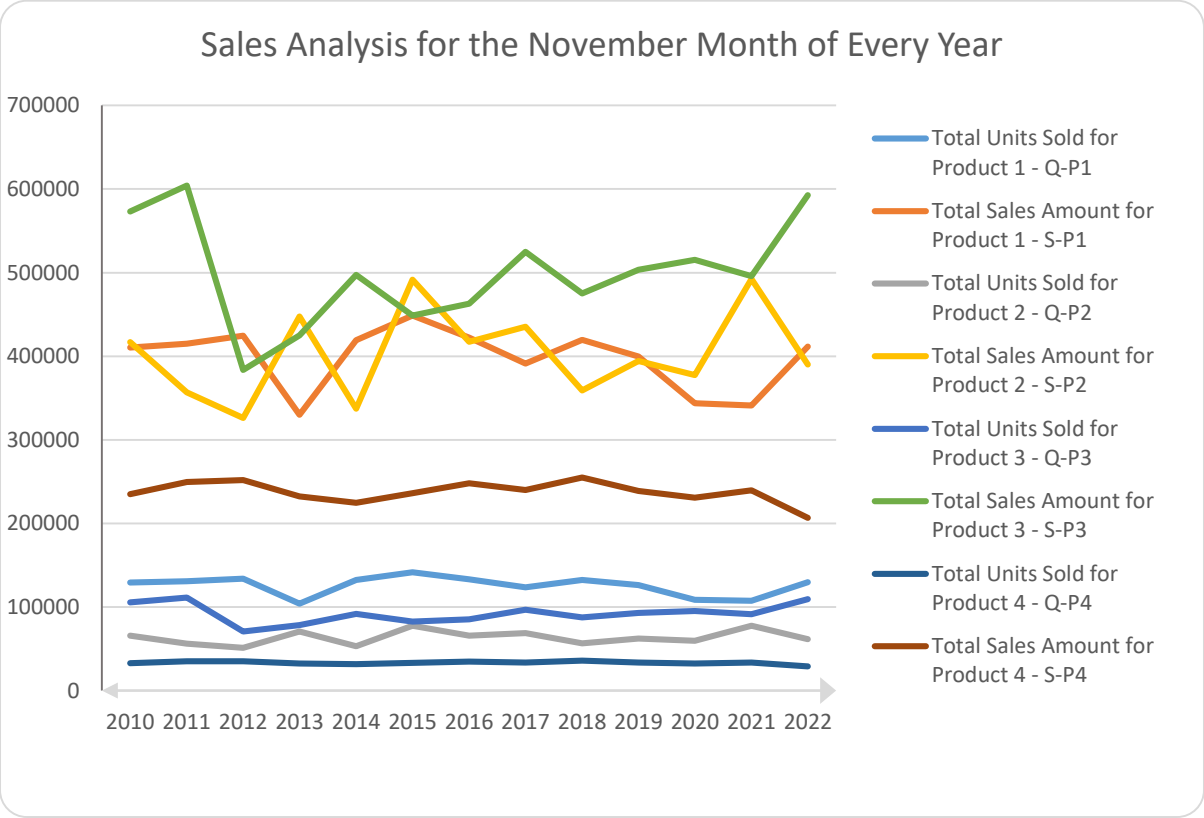
9. September



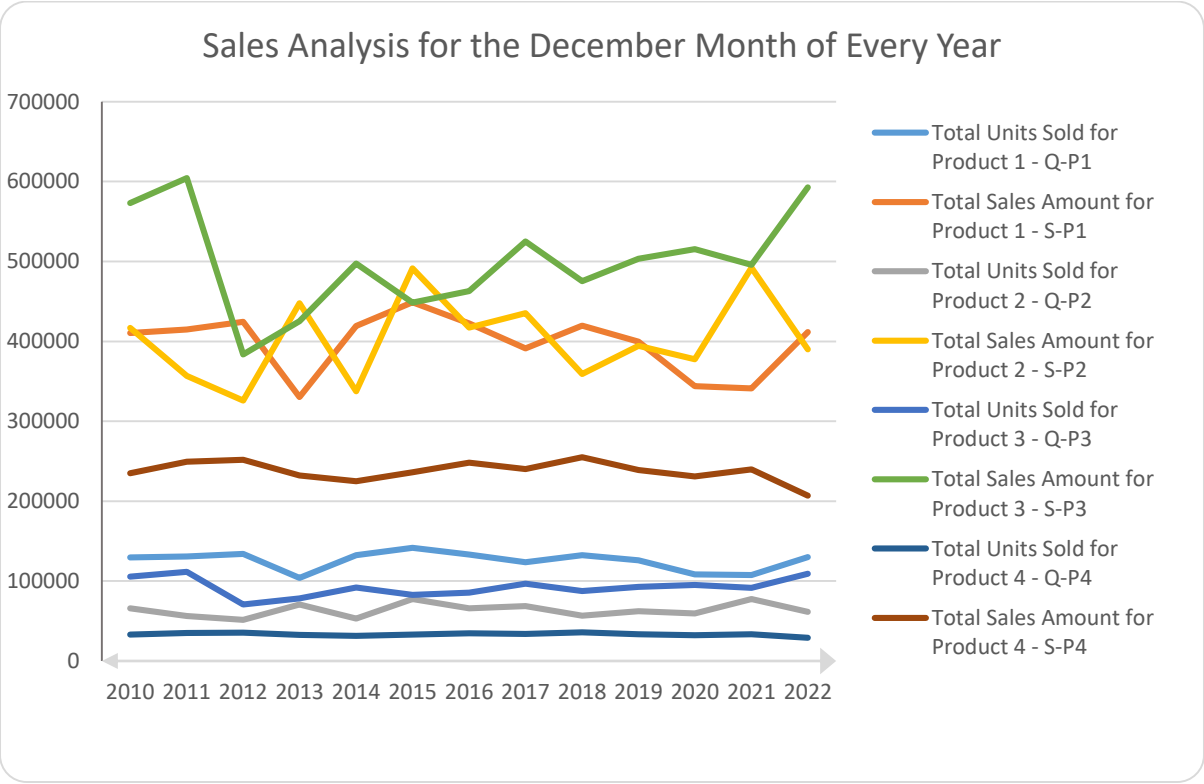

10. October



11. November




12. December



**My Interpretation**

If we analyse in more accurate way, even we can get the future date for the more sales for which product. This below table summarises the whole data in simple format.

| **Product List** | | **Year** | **Value** |
|---|---|---|---|
| **Product 1** | **Units Sold** | 2014 | 1572144 |
| | **Sale Value** | | 4983696.48 |
| **Product 2** | **Units Sold** | 2017 | 808843 |
| | **Sale Value** | | 5128064.62 |
| **Product 3** | **Units Sold** | 2020 | 1175277 |
| | **Sale Value** | | 6370001.34 |
| **Product 4** | **Units Sold** | 2020 | 419854 |
| | **Sale Value** | | 2993559.02 |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