

Business Analyst Project

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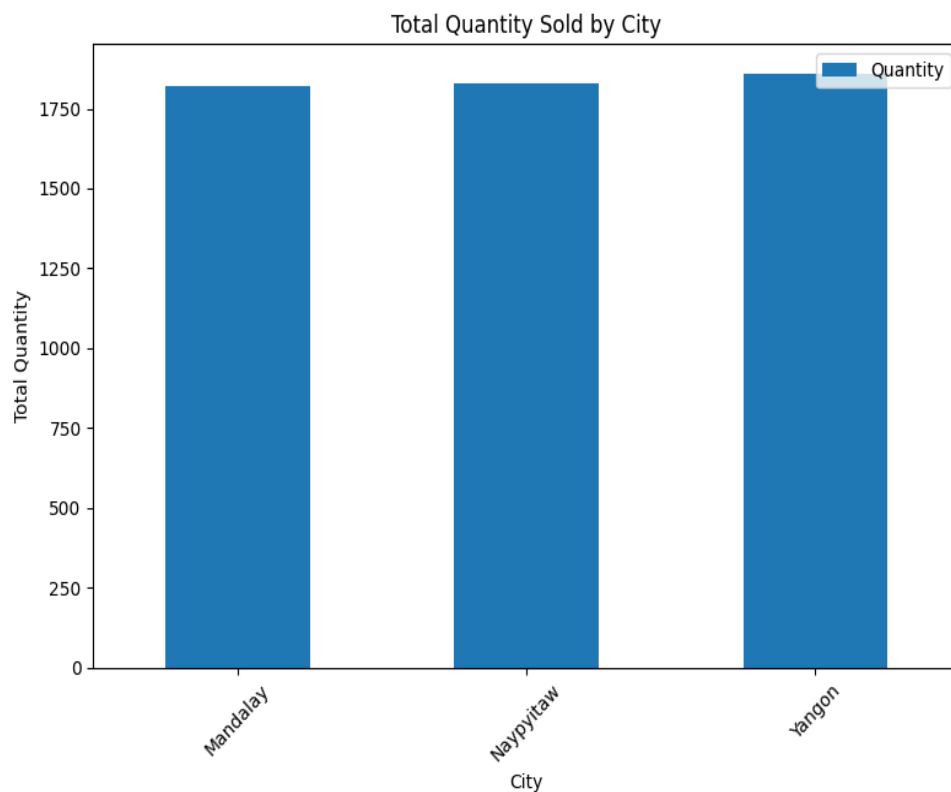
Walmart Sales Analysis:

1. Analyze the performance of sales and revenue at the city and branch level

Sales for the City wise:

Sales Quantity for City-wise:

Bar Chart:

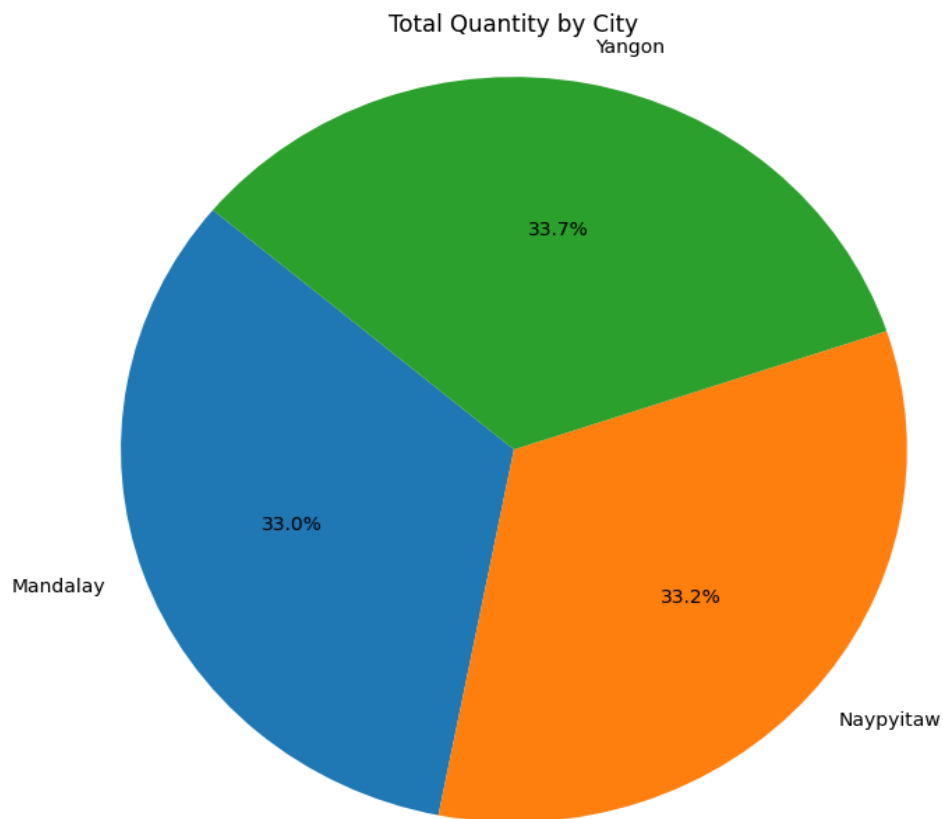


Interpretation:

In the bar chart, each bar represents the total quantity of sales for a specific city. From the data provided:

- Yangon has the highest sales quantity, with a value of 1859.
- Naypyitaw follows closely behind with a sales quantity of 1831.
- Mandalay has the lowest sales quantity among the three cities, with a value of 1820.

Pie Chart:



Interpretation:

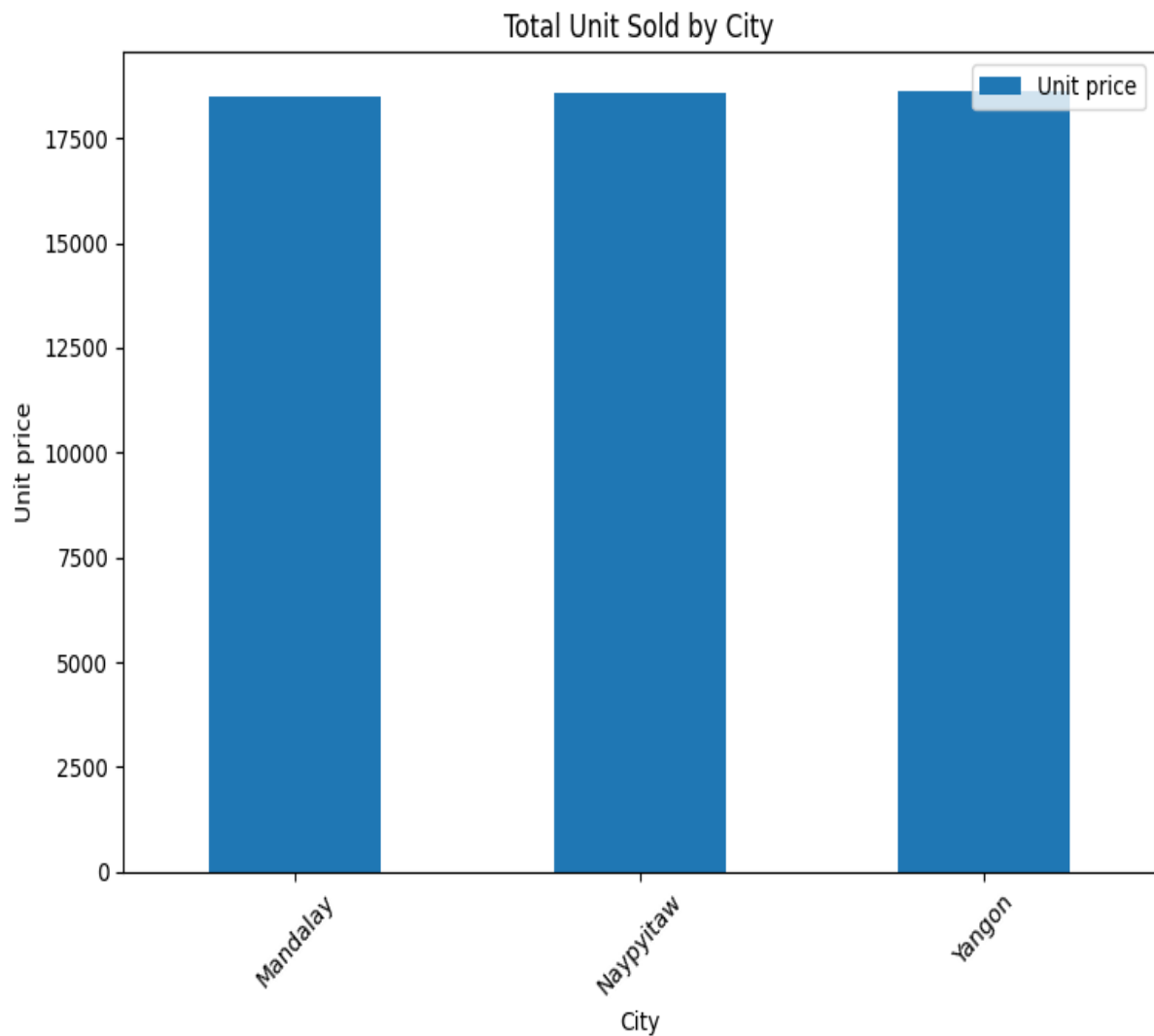
In the pie chart, each slice represents the proportion of sales quantity for each city.

- Yangon: 1859 sales (approximately 34.7%)
- Naypyitaw: 1831 sales (approximately 32.2%)
- Mandalay: 1820 sales (approximately 33.0%)

Both visualizations provide a clear comparison of sales quantities among the cities. They indicate a relatively balanced distribution of sales quantities among Yangon, Naypyitaw, and Mandalay, with Yangon leading slightly in quantity.

Sales Unit price for City-wise:

Bar Chart:

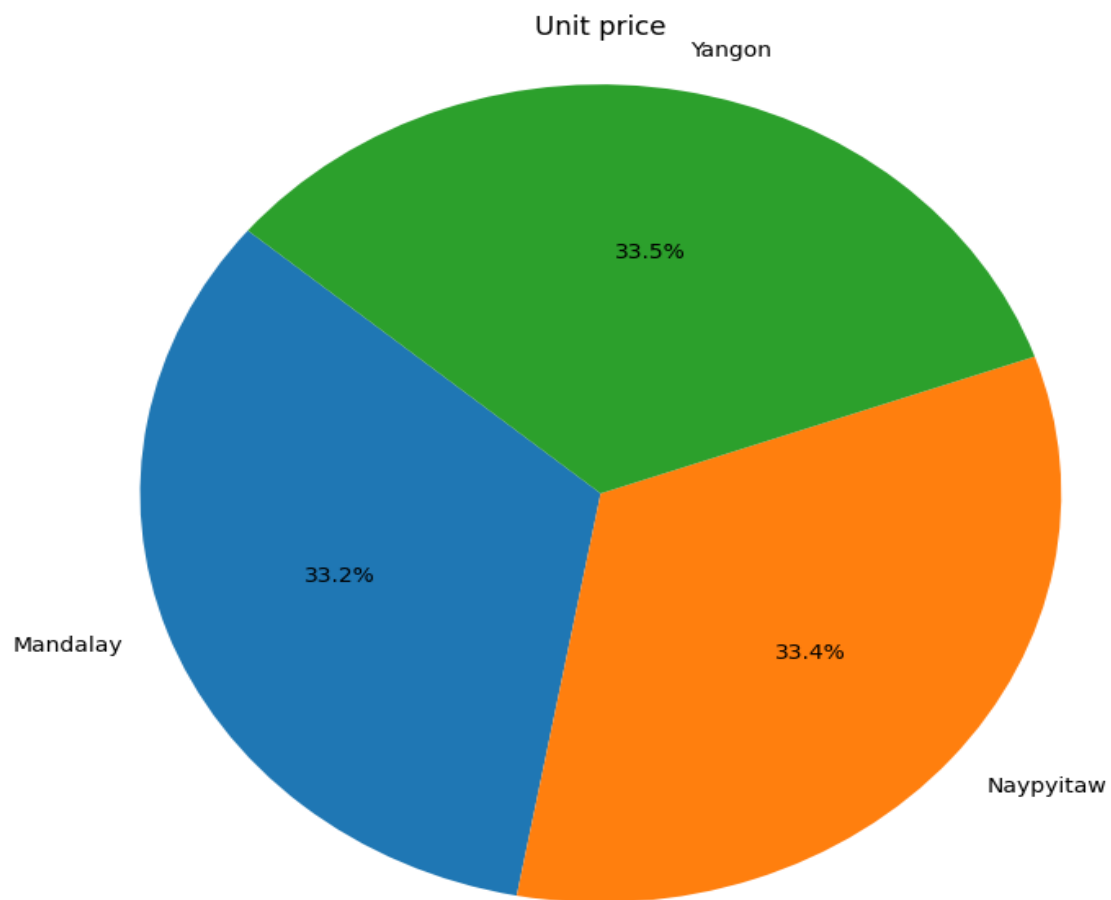


Interpretation:

In the bar chart, each bar represents the total Unit price of sales for a specific city. From the data provided:

- Yangon has the highest sales quantity, with a value of 18625.49.
- Naypyitaw follows closely behind with a sales quantity of 18567.76
- Mandalay has the lowest sales quantity among the three cities, with a value of 18478.88.

Pie Chart:



Interpretation:

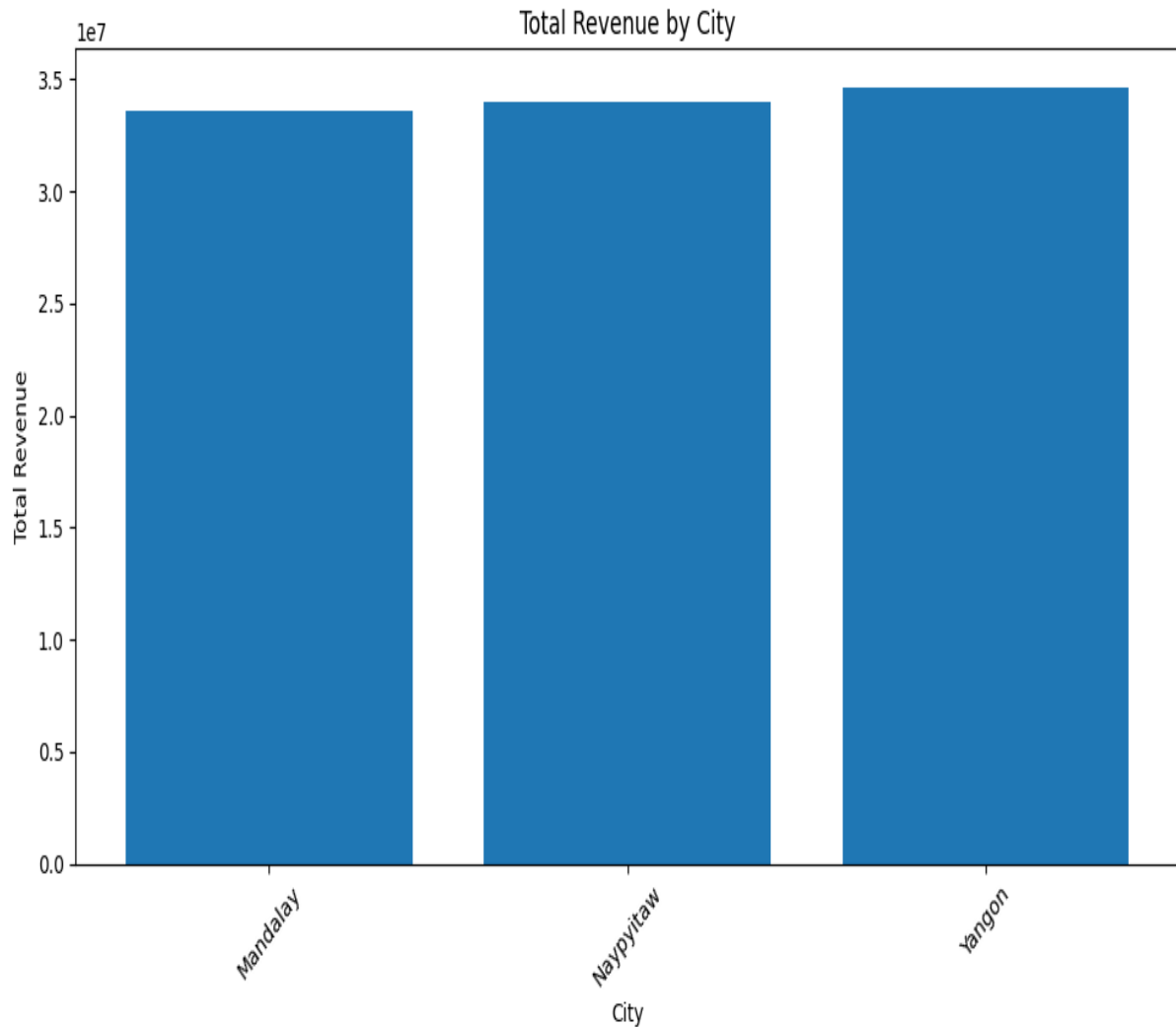
In the pie chart, each slice represents the proportion of sales Unit Price for each city.

- Yangon: 18625.49 sales (approximately 33.5%)
- Naypyitaw: 18.567.76 sales (approximately 33.4%)
- Mandalay: 18478.88 sales (approximately 33.2%)

Both visualizations provide a clear comparison of sales unit prices among the cities. They indicate a relatively balanced distribution of sales unit price among Yangon, Naypyitaw, and Mandalay, with Yangon leading slightly in quantity.

Sales of Total Revenue for city-wise

Bar Chart:

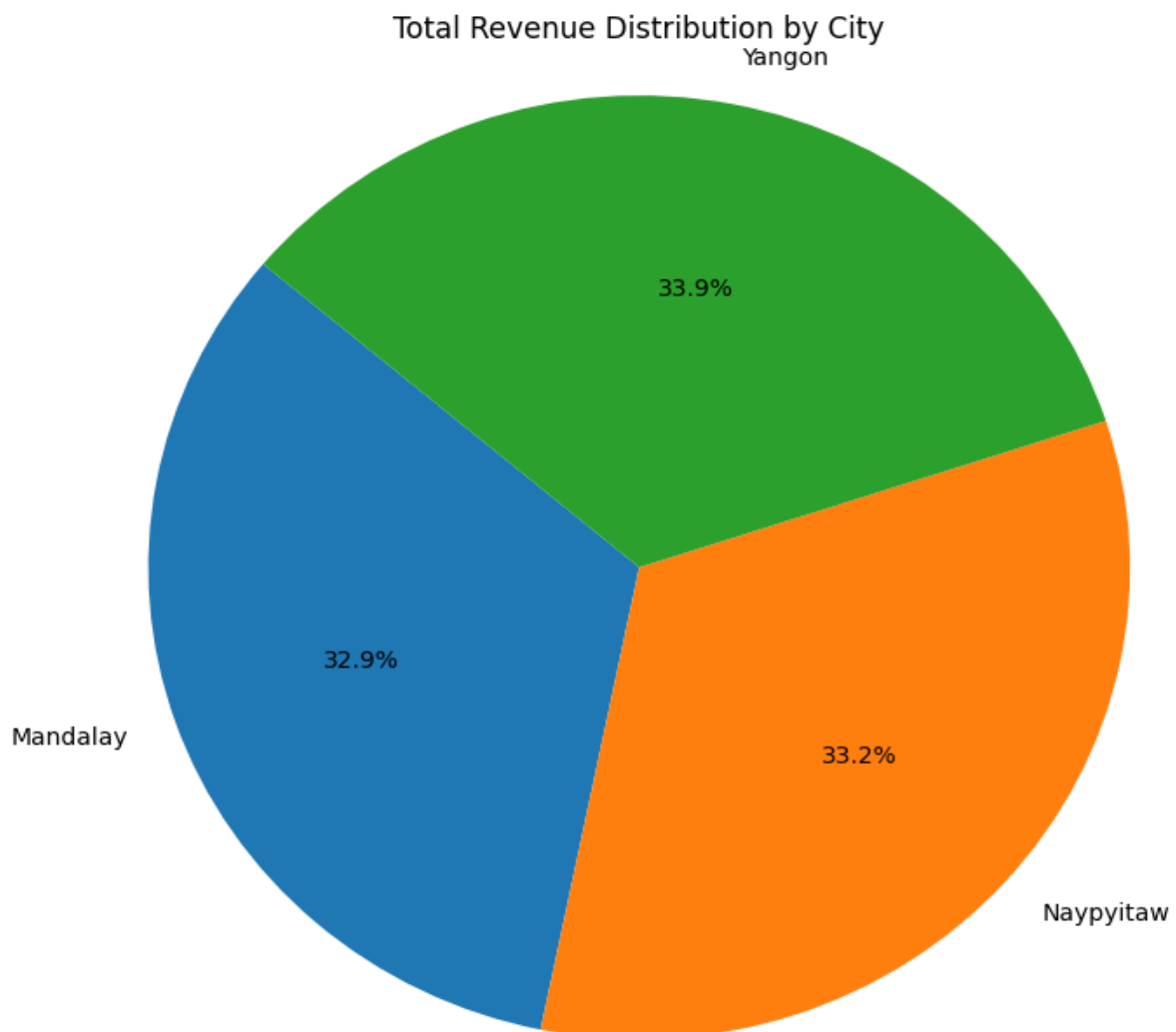


Interpretation:

In the bar chart, each bar represents the total revenue of sales for a specific city. From the data provided:

- Yangon has the highest sales quantity, with a value of 34624785.91.
- Naypyitaw follows closely behind with a sales quantity of 33997568.56
- Mandalay has the lowest sales quantity among the three cities, with a value of 33631561.60.

Pie Chart:



Interpretation:

In the pie chart, each slice represents the proportion of sales Unit Price for each city.

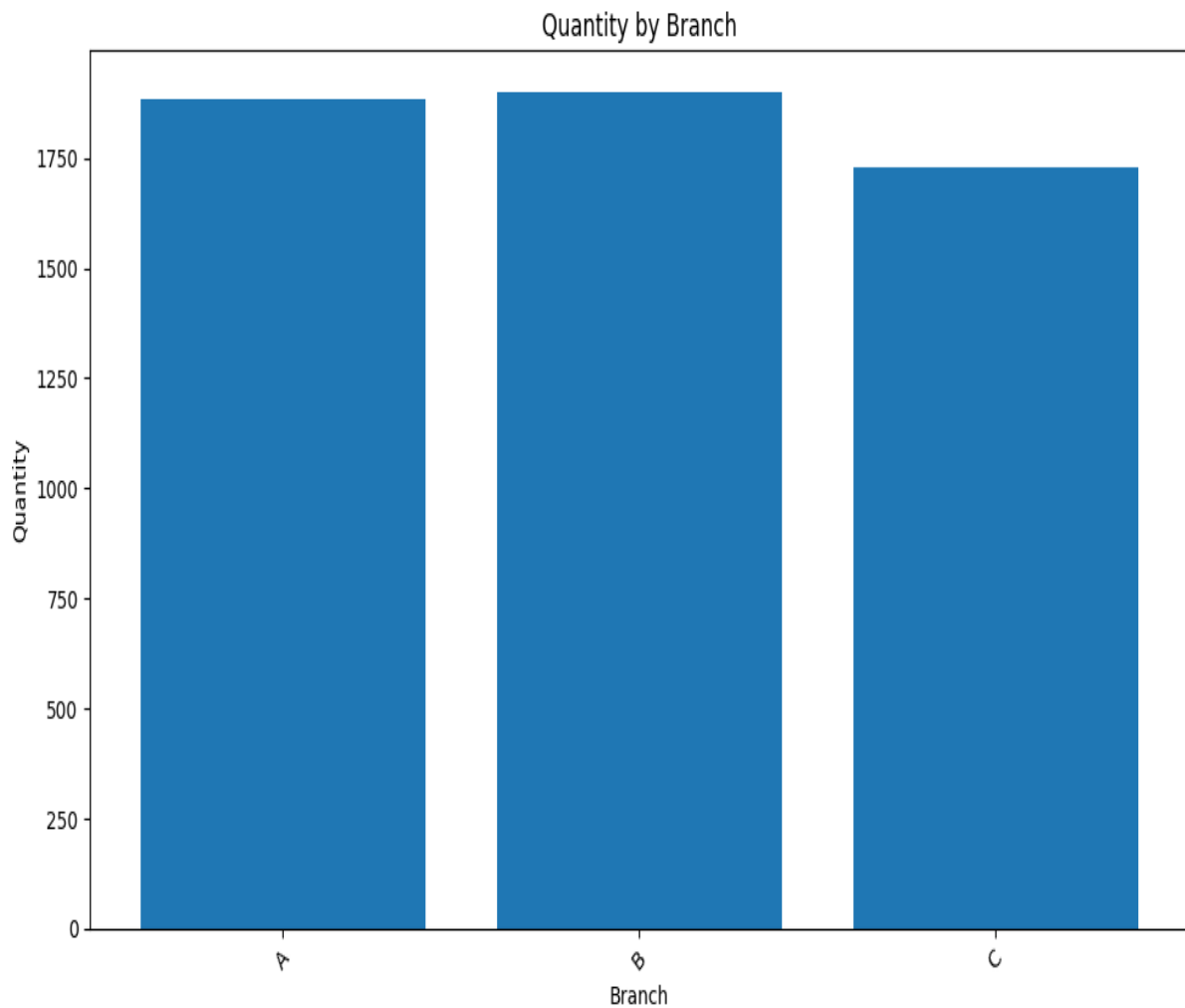
- Yangon: 34624785.91sales (approximately 33.9%)
- Naypyitaw: 33997568.56 sales (approximately 33.2%)
- Mandalay: 33631561.60 sales (approximately 33.9%)

Both visualizations provide a clear comparison of sales total revenue among the cities. They indicate a relatively balanced distribution of sales total revenue among Yangon, Naypyitaw, and Mandalay, with Yangon leading slightly in quantity.

Sales for the Branch wise:

Sales Quantity for Branch-wise:

Bar Chart:

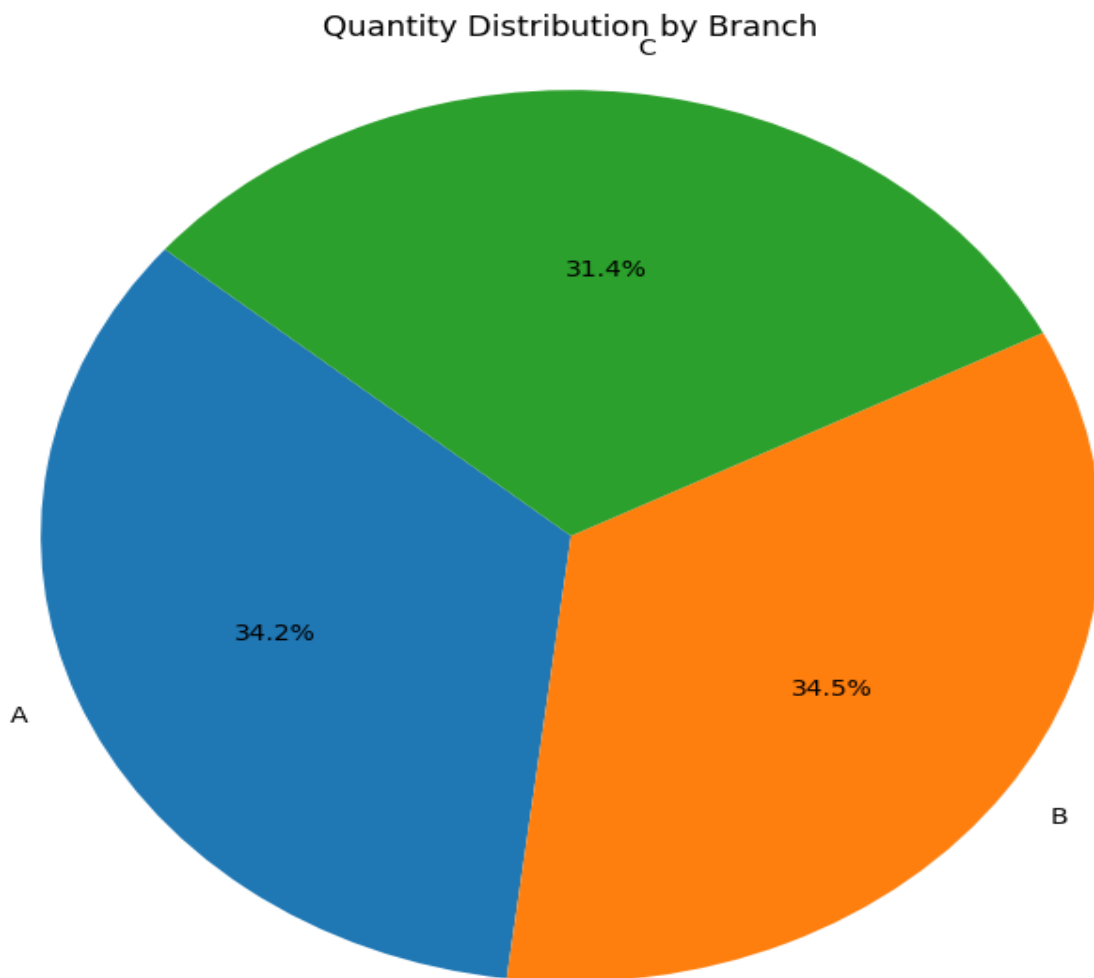


Interpretation:

In the bar chart, each bar represents the Quantity of sales for a specific Branch. From the data provided:

- Branch B has the highest sales quantity, with a value of 1899.
- Branch A follows closely behind with a sales quantity of 1883
- Branch C has the lowest sales quantity among the three cities, with a value of 172

Pie chart:



Interpretation:

In the pie chart, each slice represents the proportion of sales quantity for each Branch.

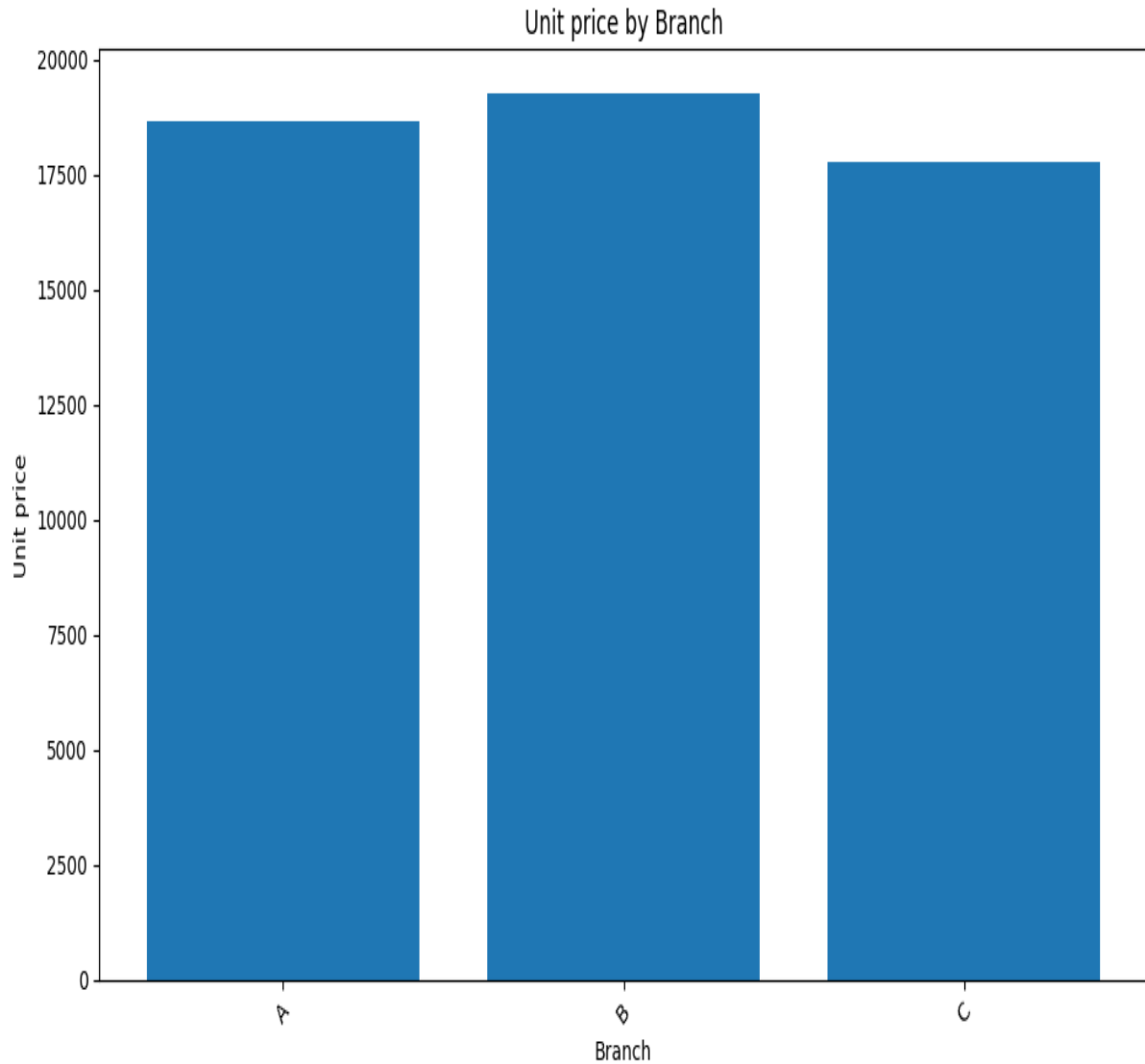
- Branch A: 1899 sales (approximately 34.2%)
- Branch B: 1883 sales (approximately 34.5%)
- Branch C: 1728 sales (approximately 31.4%)

This visualization indicates the distribution of sales quantities among the branches.

- ❖ Branch B and Branch A have relatively similar sales quantities, accounting for around 34% of the total sales.
- ❖ Branch C has a slightly lower sales quantity compared to the other two branches, accounting for approximately 31% of the total sales.
- ❖ Overall, the pie chart provides a clear comparison of sales quantities among the branches, showing that Branch B and Branch A have similar sales performance, while Branch C lags slightly behind.

Sales Unit Price for Branch-wise:

Bar Chart:

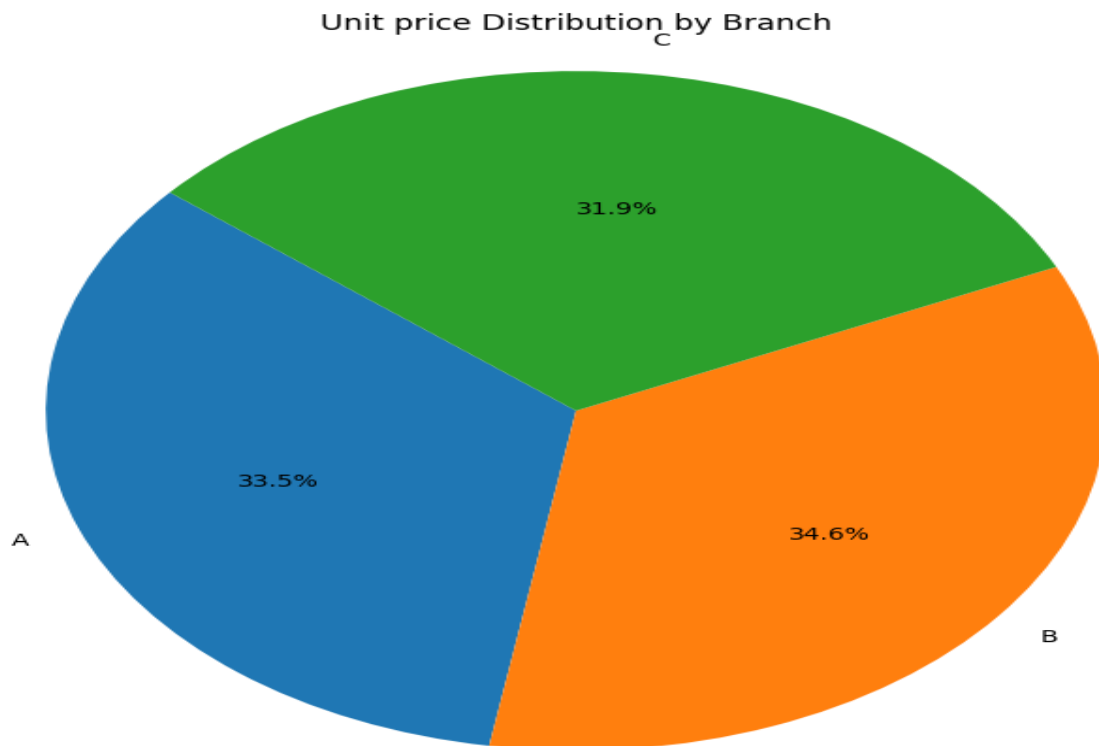


Interpretation:

In the bar chart, each bar represents the Unit Price of sales for a specific Branch. From the data provided:

- Branch B has the highest sales quantity, with a value of 19251.62
- Branch A follows closely behind with a sales quantity of 18645.54.
- Branch C has the lowest sales quantity among the three cities, with a value of 17774.97

Pie chart:



Interpretation:

In the pie chart, each slice represents the proportion of unit prices for each branch out of the total.

- Branch B: 19251.62 (approximately 34.6%)
- Branch A: 18645.54 (approximately 33.5%)
- Branch C: 17774.97 (approximately 31.9%)

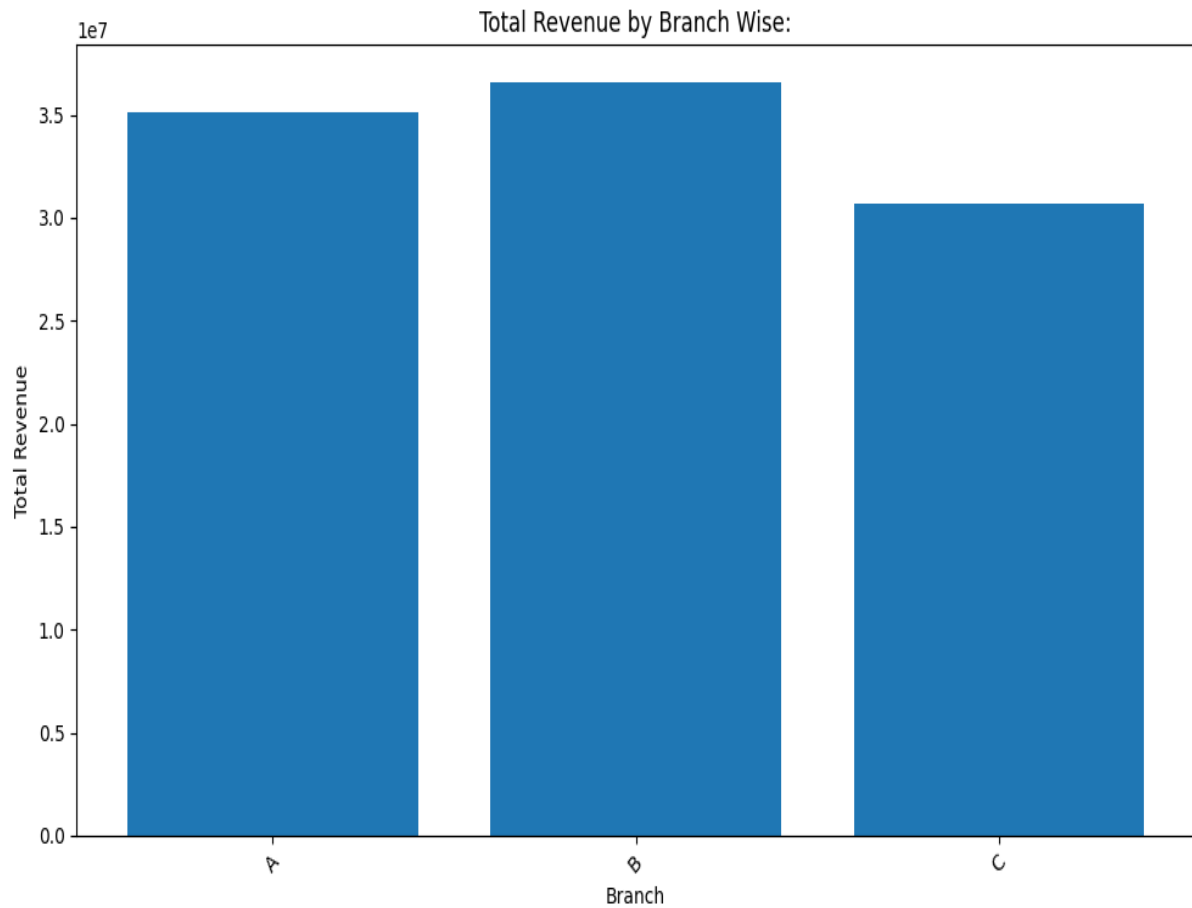
This visualization offers insights into the distribution of unit prices among the branches.

- Branch B has the highest proportion of unit prices, accounting for approximately 34.6% of the total.
- Branch A follows closely behind Branch B, with a proportion of approximately 33.5%.
- Branch C has the lowest proportion of unit prices among the three branches, accounting for approximately 31.9% of the total.

The pie chart enables a quick comparison of unit price distributions among the branches, indicating potential differences in pricing strategies or product offerings. Branch B appears to have a slightly higher proportion of higher-priced items compared to Branch A and Branch C.

Sales Total Revenue for Branch-wise:

Bar Chart:



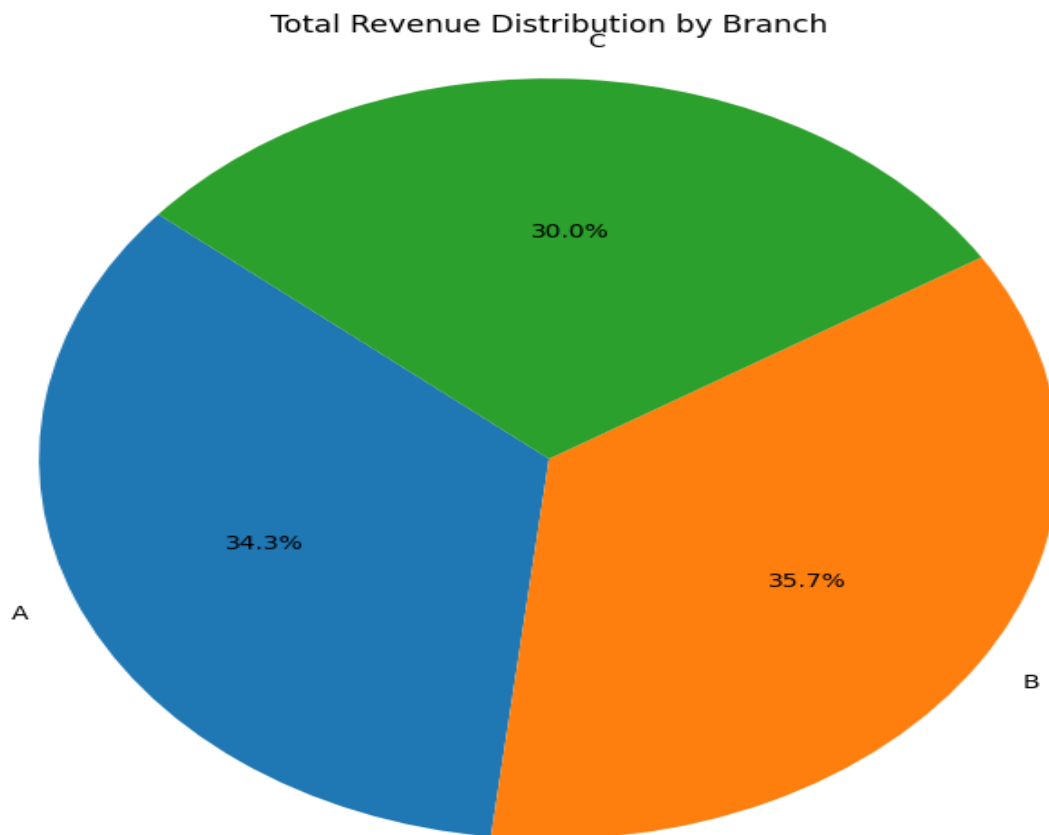
Interpretation:

In the bar chart, each bar represents the Total Revenue of sales for a specific Branch. From the data provided:

- Branch B has the highest sales quantity, with a value of 36558826.38.
- Branch A follows closely behind with a sales quantity of 35109551.82.
- Branch C has the lowest sales quantity among the three cities, with a value of 30715148.16

Sales Total Revenue for Branch-wise:

Pie chart:



Interpretation:

In the pie chart, each slice represents the proportion of total revenue for each branch out of the total.

- ❖ Branch B: 36558826.38 (approximately 35.7%)
- ❖ Branch A: 35109551.82 (approximately 34.3%)
- ❖ Branch C: 30715148.16 (approximately 30.0%)

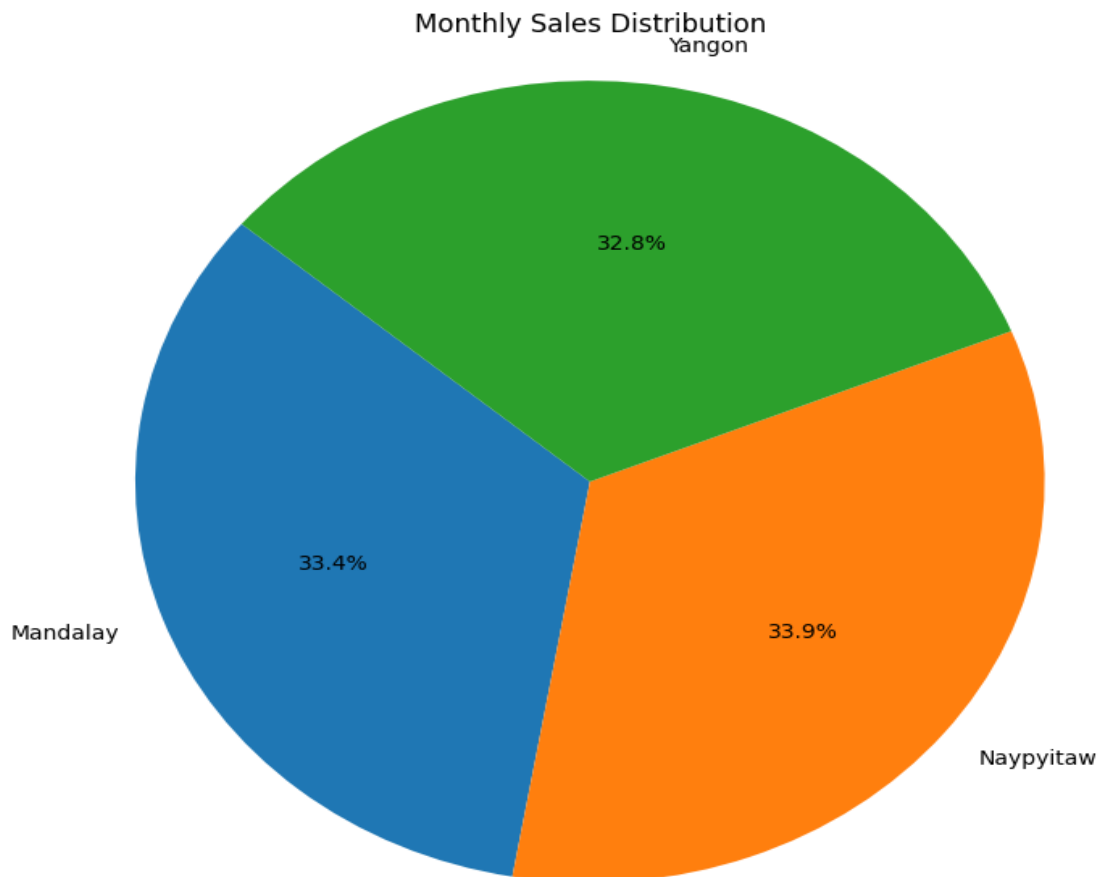
This visualization provides insights into the distribution of total revenue among the branches.

- ✓ Branch B has the highest proportion of total revenue, accounting for approximately 35.7% of the total.
- ✓ Branch A closely follows Branch B, with a proportion of approximately 34.3%.
- ✓ Branch C has the lowest proportion of total revenue among the three branches, accounting for approximately 30.0% of the total.

The pie chart offers a quick comparison of revenue distributions among the branches, indicating potential differences in sales performance or market share. Branch B appears to generate the highest revenue, followed by Branch A, while Branch C contributes the least to the total revenue.

B. What is the average price of an item sold at each branch of the city

Pie Chart:



Interpretation:

In the pie chart, each slice represents the proportion of average sales for each city and branch.

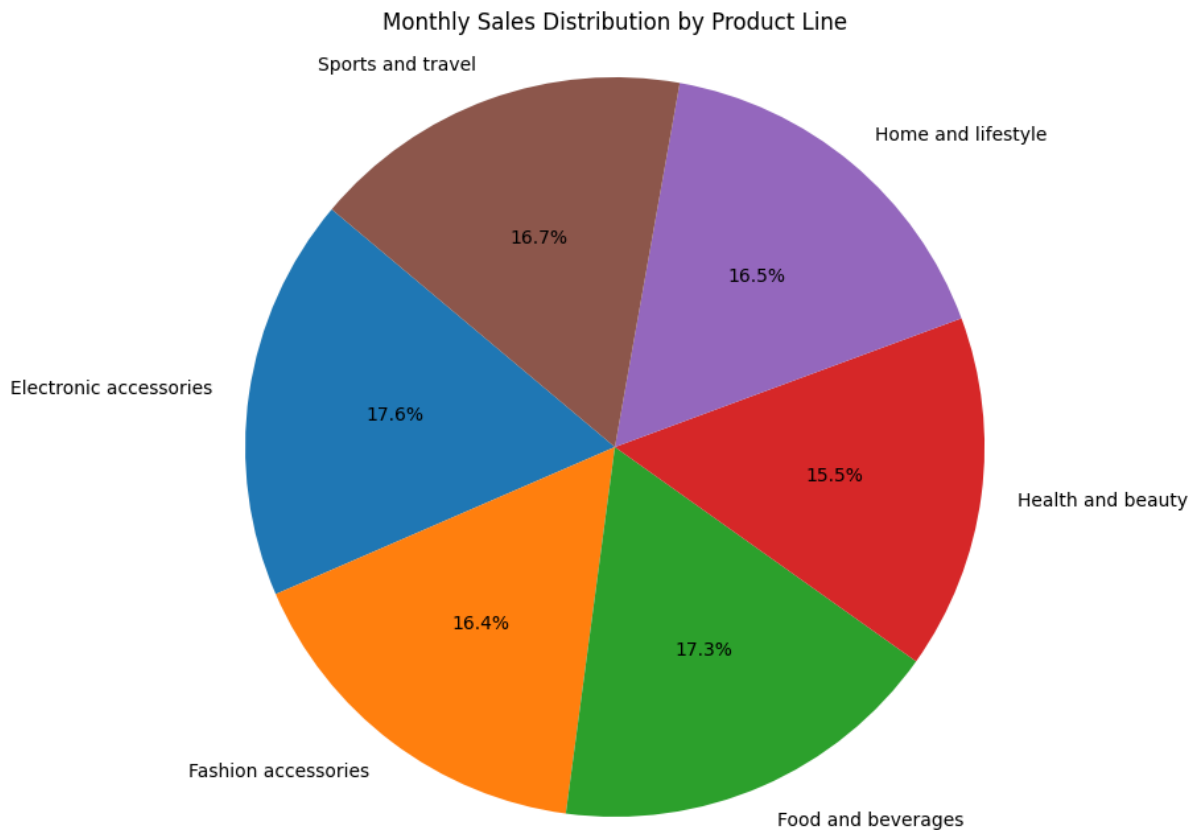
- Yangon: (approximately 32.8%)
- Naypyitaw: (approximately 33.9%)
- Mandalay: (approximately 33.4%)

Both visualizations provide a clear comparison of average revenue among the cities and branches. They indicate a relatively balanced distribution of sales average revenue in Yangon, Naypyitaw, and Mandalay, with Naypyitaw leading slightly in increase.

C. Analyze the performance of sales and revenue, Month over Month across the Product line, Gender, and Payment Method, and identify the focus areas to get better sales for April 2019.

Pie chart:

Monthly sales distribution by product line



Interpretation:

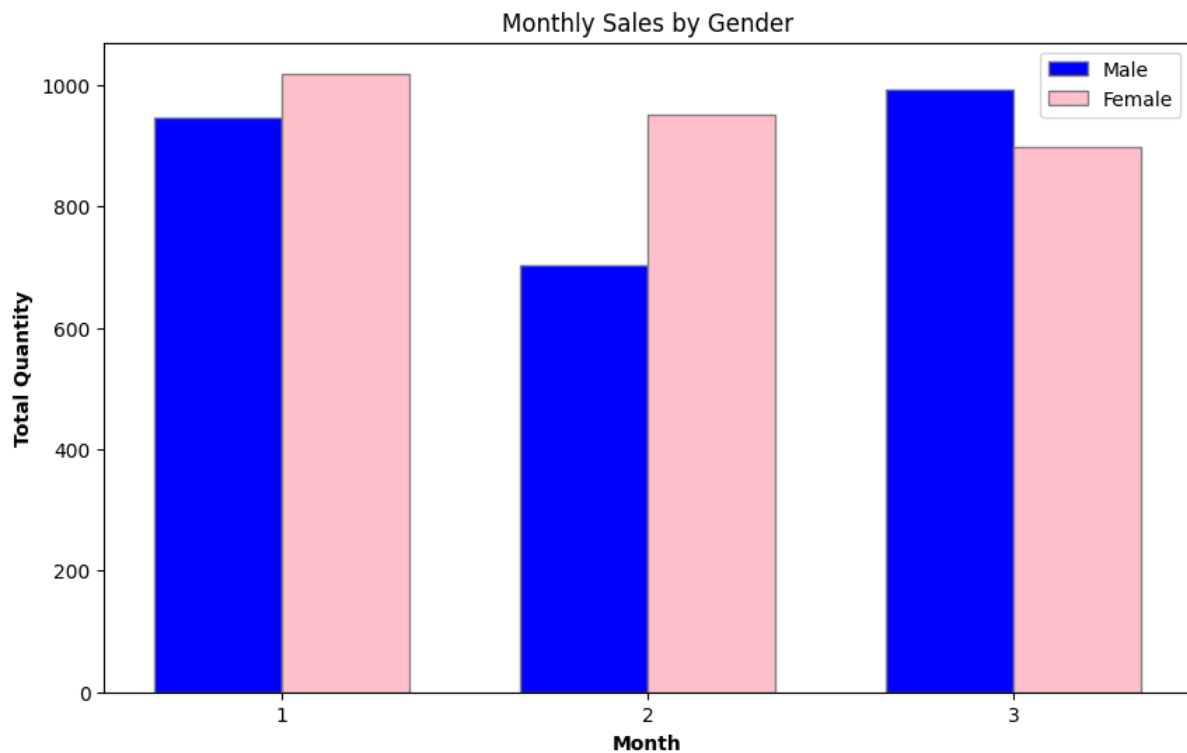
- ❖ Electronic Accessories: 17.6%
- ❖ Food and Beverage: 17.3%
- ❖ Sports and Travel: 16.7%
- ❖ Home and Lifestyle: 16.5%
- ❖ Fashion Accessories: 16.4%
- ❖ Health and Beauty: 15.5%

This visualization offers insights into the distribution of sales among different product lines.

- ✓ Electronic Accessories and Food and Beverage are the top-selling product lines, each accounting for approximately 17.6% and 17.3% of total sales, respectively.
- ✓ Sports and Travel and Home and Lifestyle follow closely behind, with proportions of approximately 16.7% and 16.5%, respectively.
- ✓ Fashion Accessories and Health and Beauty have slightly lower proportions of sales, accounting for approximately 16.4% and 15.5%, respectively.

Monthly sales distribution by product line

Multiple Bar Diagram:



Interpretation:

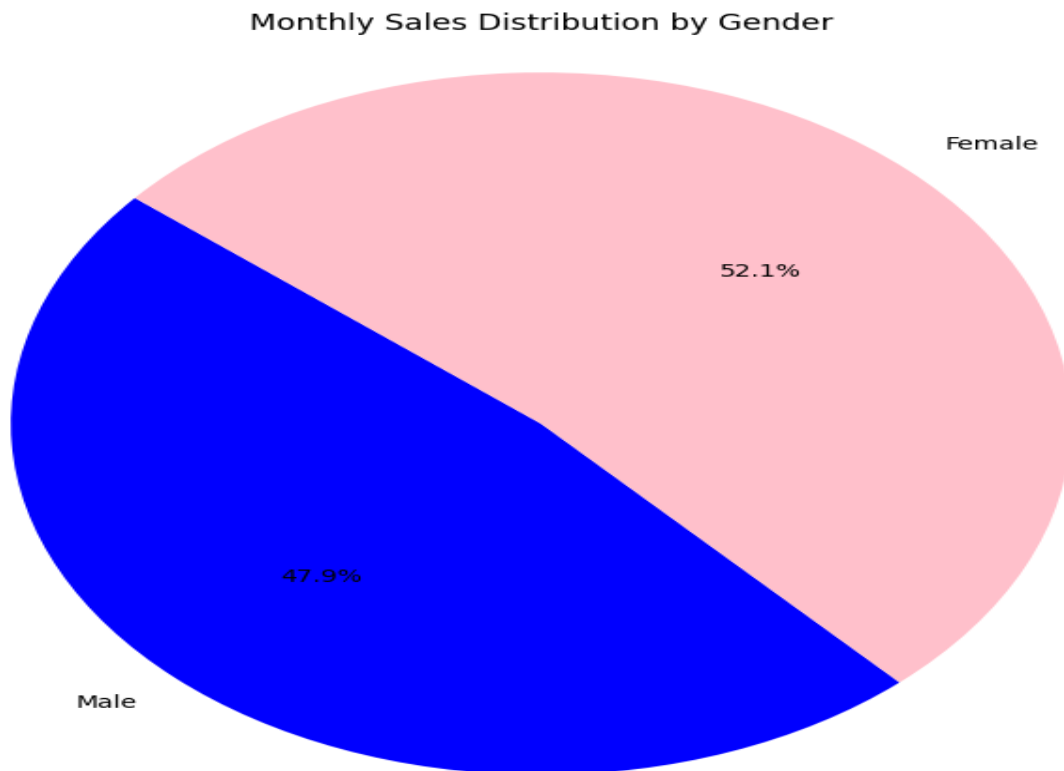
This bar diagram represents monthly sales data categorized by gender (male and female). The x-axis shows the month, and the y-axis represents the total quantity or sales amount.

- ✓ In the first month, the sales for males (represented by the blue bar) were significantly higher than the sales for females (represented by the pink bar).
- ✓ In the second month, sales for both genders decreased compared to the first month, but the female sales were slightly higher than the male sales.
- ✓ In the third month, the sales for males increased substantially compared to the previous months, while the sales for females also increased but remained lower than the male sales.

Overall, the diagram illustrates the fluctuations in sales between genders over three months, with males generally having higher sales than females, except for the second month where female sales slightly exceeded male sales.

Monthly Sales Distribution by Gender

Pie Chart:



Interpretation:

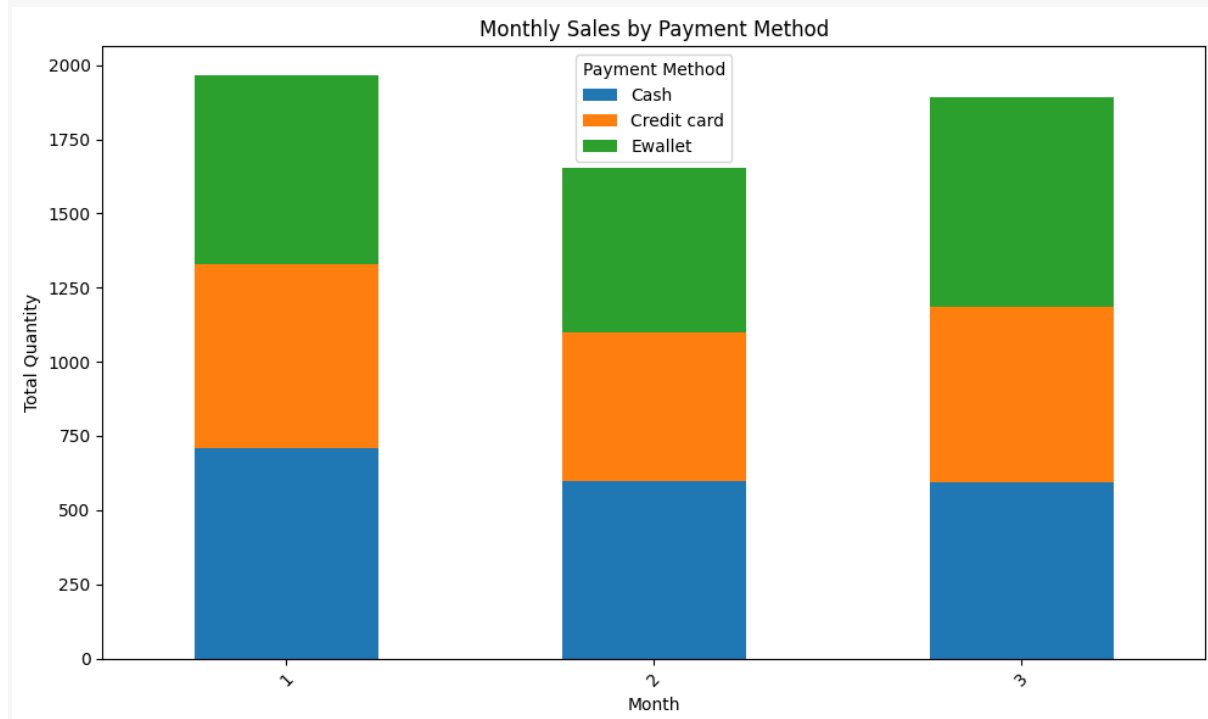
This pie chart represents the distribution of monthly sales by gender. The blue slice represents sales made by males, while the pink slice represents sales made by females.

- ✓ According to the chart, 52.1% of the monthly sales were made by females, while the remaining 47.9% of sales were made by males.
- ✓ The data indicates that female customers contributed a slightly larger portion of the total monthly sales compared to male customers. However, the difference in sales distribution between genders is relatively small, with females having a slightly higher share than males.

Overall, this pie chart provides a visual representation of the gender breakdown in monthly sales, allowing for a quick comparison of the relative contributions from male and female customers.

Monthly sales by payment method

Stacked Bar Diagram:

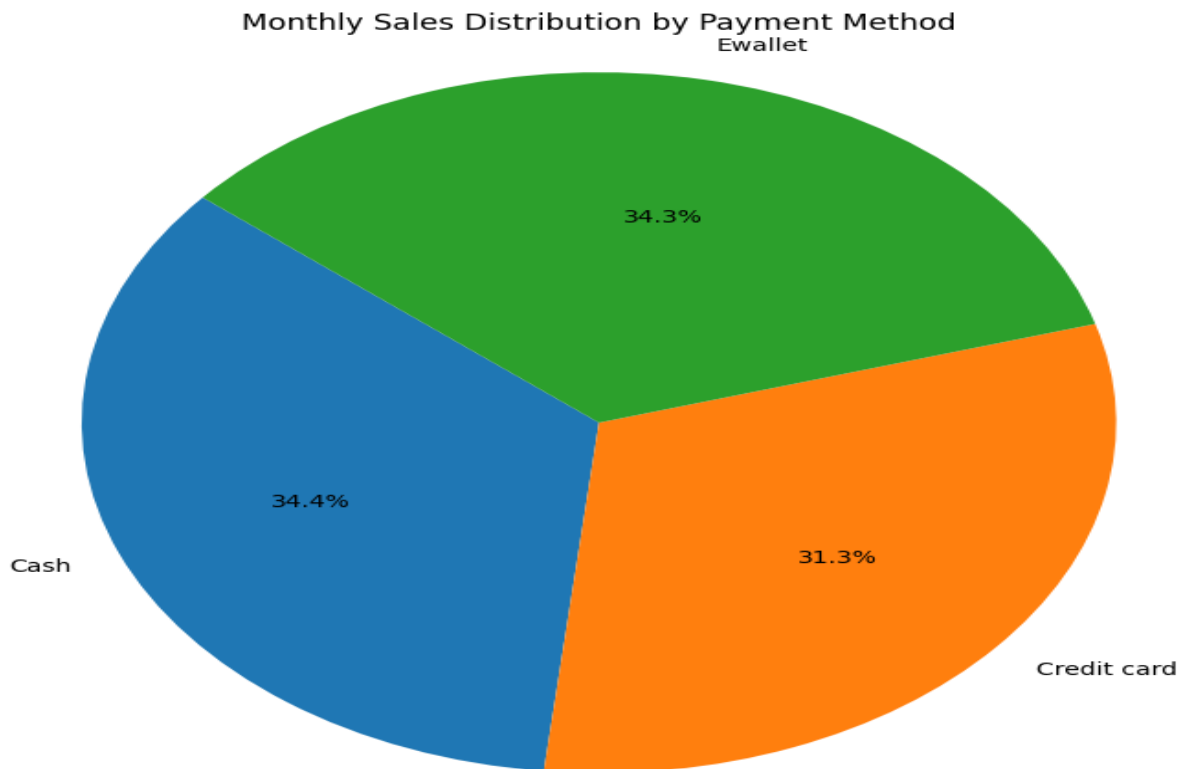


Interpretation:

- ✓ This stacked bar chart displays the monthly sales breakdown by different payment methods - cash, credit card, and e-wallet. Each bar represents the total sales for a given month, with the different colored segments within the bar indicating the proportions attributed to each payment type.
- ✓ The bottom blue segment shows the cash sales, the middle orange segment represents credit card transactions, and the top green segment corresponds to e-wallet payments.
- ✓ By comparing the bars, we can analyze the sales volumes and payment method preferences across different months. The relative heights of the colored segments within each bar provide insights into the popularity and usage patterns of the various payment options over time.
- ✓ This visualization allows businesses to monitor sales trends, identify preferred payment methods, and make informed decisions about accepting or promoting specific payment types based on customer behavior and preferences.

Monthly sales distribution by Payment Method

Pie chart:



Interpretation:

- ❖ This pie chart depicts the monthly sales distribution across different payment methods: cash, credit card, and e-wallet.
- ❖ The largest slice of the pie, colored green, represents 34.3% of sales made through e-wallet payments. This indicates a significant adoption and usage of digital wallet solutions among customers.
- ❖ The second-largest slice, colored blue, accounts for 34.4% of sales paid in cash. Cash remains a popular payment choice, closely trailing e-wallet transactions.
- ❖ The orange slice represents 31.3% of sales paid via credit card. While credit cards are widely used, they slightly lag behind cash and e-wallet payments in this particular sales distribution.
- ❖ This visualization provides valuable insights into customer preferences and payment behavior. Businesses can leverage this information to optimize their payment acceptance strategies, prioritize preferred payment methods, and cater to customer demands more effectively. Additionally, it highlights the growing popularity of digital payment solutions like e-wallets, which businesses may want to embrace and promote further.