Created by: Younesh Mahaseth

Answers to the Questions

1. ## How do sales vary by day of the week and hours of the day?

=> The sales value for different days of the week is as following:

- **Sunday:** $98,330
- **Monday:** $101,677
- **Tuesday:** $99,455
- **Wednesday:** $100,313
- **Thursday:** $100,767
- **Friday:** $101,373
- **Saturday:** $96,894

From this data, we can see that:

- **Monday and Friday** have the highest sales, with around $101,677 and $101,373, respectively.
- **Saturday and Sunday** have the lowest sales, with around $96,894 and $98,330, respectively.
- The other days (Tuesday, Wednesday, and Thursday) have similar sales, ranging from $99,455 to $100,767.

So, it looks like weekdays, especially Monday and Friday, tend to have higher sales, while weekends are a bit slower in terms of sales.

Variation based on hours of the day:

- Sales skyrocket between **6 AM and 10 AM**, reaching the highest point at **10 AM**.
- After 10 AM, sales gradually fall and then maintain a similar range until **7 PM**, showing a slow, gradual decline in sales.
- This means the busiest time of day for sales is in the morning, peaking around 10 AM, and then it steadies out through the rest of the day until the evening.

2. Are there any peak times for sales activity?

=> Yes, there are peak times for sales activity. The peak time is in the morning, specifically between **6 AM and 10 AM**, with the highest sales occurring at **10 AM**. After 10 AM, sales gradually decline and maintain a steady range until **7 PM**. So, the morning hours, particularly around 10 AM, are the busiest for sales activity.

3. What is the total sales revenue for each month?

=> Total Sales Revenue for Each Month:

- **January:** $81,677.74
- **February:** $76,145.19
- **March:** $98,834.58
- **April:** $118,941.00
- **May:** $156,727.76
- **June:** $166,485.88

From this data, we can see that sales revenue increases steadily each month, with June having the highest total sales revenue at $166,485.88 and February having the lowest at $76,145.19.

4. How do sales vary across different store locations?

=> Sales Variation Across Different Store Locations:

- **Astoria:** $232,243.91
- **Hell's Kitchen:** $234,511.17
- **Lower Manhattan:** $230,057.25

From this data, we can see that:

- **Hell's Kitchen** has the highest sales at $234,511.17.
- **Astoria** follows closely with $232,243.91.
- **Lower Manhattan** has the lowest sales among the three, at $230,057.25.

Hence, sales are quite similar across the three locations, with Hell's Kitchen having a slight edge in total sales.

5. What is the average price/order per person?

=> The average price per order per person is **$4.69**.

6. Which products are the best-selling in terms of quantity and revenue?

=> Best-Selling Products in Terms of Quantity and Revenue:

1. **Barista Espresso:** $91,406.20
2. **Brewed Chai Tea:** $77,081.95
3. **Hot Chocolate:** $72,416.00
4. **Gourmet Brewed Coffee:** $70,034.60
5. **Brewed Black Tea:** $47,932.00

From this data, we can see that **Barista Espresso** is the best-selling product, generating the highest revenue at $91,406.20, followed by **Brewed Chai Tea** and **Hot Chocolate**.

7. How do sales vary by product category and type?

=> Based on the pie chart showing the percentage distribution of sales by product categories:

- **Coffee:** 39%
- **Tea:** 28%
- **Bakery:** 12%
- **Coffee Beans:** 10%
- **Drinking Chocolate:** 6%
- **Branded Products:** 2%
- **Flavours:** 1%
- **Loose Tea:** 1%
- **Packaged Chocolate:** 1%

From this distribution, we can see that:

- **Coffee** is the top-selling category, making up 39% of total sales.

- **Tea** is the second most popular category, contributing to 28% of sales.
- **Bakery** items also perform well, accounting for 12% of sales.
- **Coffee Beans** and **Drinking Chocolate** have moderate sales, with 10% and 6% respectively.
- **Branded Products**, **Flavours**, **Loose Tea**, and **Packaged Chocolate** contribute to a smaller portion of sales, each making up 2% or less of the total sales.

In conclusion, Coffee and Tea are the dominant product categories, followed by Bakery items, while the other categories have smaller shares in the sales distribution.