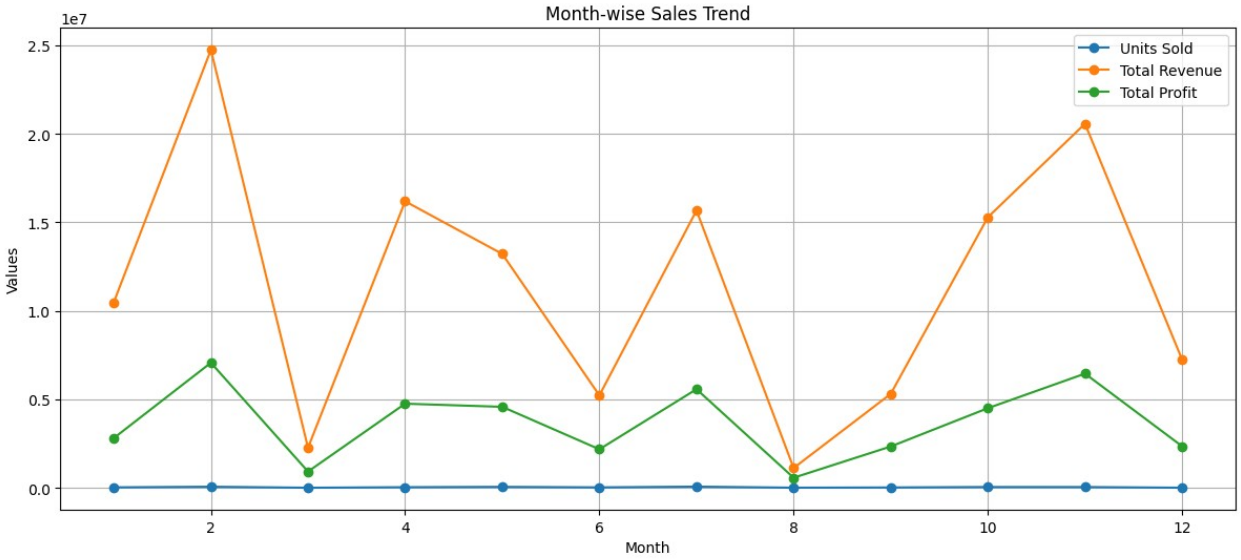
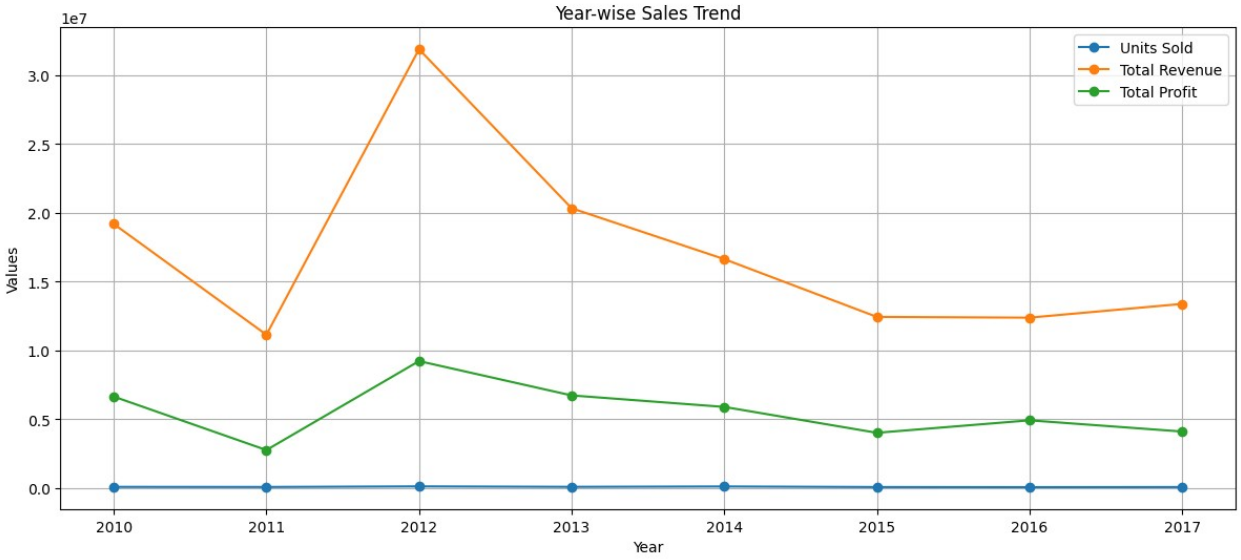
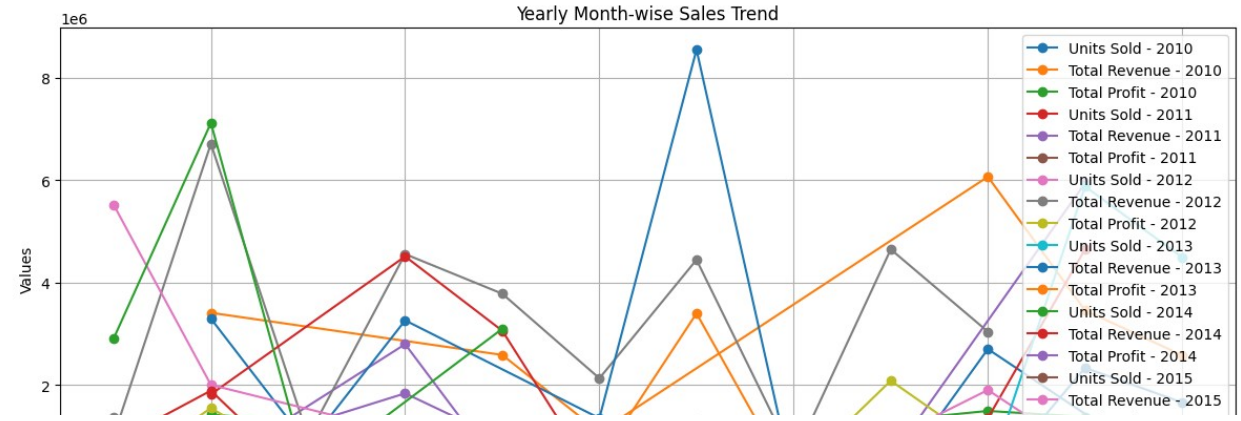
```
import pandas as pd
import matplotlib.pyplot as plt

# Correct file path
file_path = '/content/SalesData.csv'

# Load the data from the provided CSV file
amazon_sales_data = pd.read_csv(file_path)

# Convert 'Order Date' and 'Ship Date' to datetime format
amazon_sales_data['Order Date'] =
pd.to_datetime(amazon_sales_data['Order Date'])
amazon_sales_data['Ship Date'] =
pd.to_datetime(amazon_sales_data['Ship Date'])

# Extract month and year from 'Order Date'
amazon_sales_data['Order Month'] = amazon_sales_data['Order
Date'].dt.month
amazon_sales_data['Order Year'] = amazon_sales_data['Order
Date'].dt.year

# Aggregate data for analysis
month_wise_sales = amazon_sales_data.groupby('Order Month').agg({
    'Units Sold': 'sum',
    'Total Revenue': 'sum',
    'Total Profit': 'sum'
}).reset_index()

year_wise_sales = amazon_sales_data.groupby('Order Year').agg({
    'Units Sold': 'sum',
    'Total Revenue': 'sum',
    'Total Profit': 'sum'
}).reset_index()

yearly_month_wise_sales = amazon_sales_data.groupby(['Order Year',
'Order Month']).agg({
    'Units Sold': 'sum',
    'Total Revenue': 'sum',
    'Total Profit': 'sum'
}).reset_index()

# Plotting the sales trends
fig, axes = plt.subplots(3, 1, figsize=(12, 18))

# Month-wise Sales Trend
axes[0].plot(month_wise_sales['Order Month'], month_wise_sales['Units
Sold'], marker='o', label='Units Sold')
axes[0].plot(month_wise_sales['Order Month'], month_wise_sales['Total
Revenue'], marker='o', label='Total Revenue')
axes[0].plot(month_wise_sales['Order Month'], month_wise_sales['Total
```

```
Profit'], marker='o', label='Total Profit')
axes[0].set_title('Month-wise Sales Trend')
axes[0].set_xlabel('Month')
axes[0].set_ylabel('Values')
axes[0].legend()
axes[0].grid(True)

# Year-wise Sales Trend
axes[1].plot(year_wise_sales['Order Year'], year_wise_sales['Units
Sold'], marker='o', label='Units Sold')
axes[1].plot(year_wise_sales['Order Year'], year_wise_sales['Total
Revenue'], marker='o', label='Total Revenue')
axes[1].plot(year_wise_sales['Order Year'], year_wise_sales['Total
Profit'], marker='o', label='Total Profit')
axes[1].set_title('Year-wise Sales Trend')
axes[1].set_xlabel('Year')
axes[1].set_ylabel('Values')
axes[1].legend()
axes[1].grid(True)

# Yearly Month-wise Sales Trend
for year in yearly_month_wise_sales['Order Year'].unique():
    data = yearly_month_wise_sales[yearly_month_wise_sales['Order
Year'] == year]
    axes[2].plot(data['Order Month'], data['Units Sold'], marker='o',
label=f'Units Sold - {year}')
    axes[2].plot(data['Order Month'], data['Total Revenue'],
marker='o', label=f'Total Revenue - {year}')
    axes[2].plot(data['Order Month'], data['Total Profit'],
marker='o', label=f'Total Profit - {year}')
axes[2].set_title('Yearly Month-wise Sales Trend')
axes[2].set_xlabel('Month')
axes[2].set_ylabel('Values')
axes[2].legend()
axes[2].grid(True)

plt.tight_layout()
plt.show()

# Key Metrics
total_units_sold = amazon_sales_data['Units Sold'].sum()
total_revenue = amazon_sales_data['Total Revenue'].sum()
total_profit = amazon_sales_data['Total Profit'].sum()

key_metrics = {
    'Total Units Sold': total_units_sold,
    'Total Revenue': total_revenue,
    'Total Profit': total_profit
}
```

```
# Correlation analysis
correlation_matrix = amazon_sales_data[['Units Sold', 'Total Revenue',
'Total Profit']].corr()

# Print Key Metrics
print("Key Metrics:")
print(key_metrics)

# Print Correlation Matrix
print("\nCorrelation Matrix:")
print(correlation_matrix)
```


Month-wise Sales Trend
1e7
Values
Month
Units Sold
Total Revenue
Total Profit


Year-wise Sales Trend
1e7
Values
Year
Units Sold
Total Revenue
Total Profit


Yearly Month-wise Sales Trend
1e6
Values
Units Sold - 2010
Total Revenue - 2010
Total Profit - 2010
Units Sold - 2011
Total Revenue - 2011
Total Profit - 2011
Units Sold - 2012
Total Revenue - 2012
Total Profit - 2012
Units Sold - 2013
Total Revenue - 2013
Total Profit - 2013
Units Sold - 2014
Total Revenue - 2014
Total Profit - 2014
Units Sold - 2015
Total Revenue - 2015

```
Key Metrics:
{'Total Units Sold': 512871, 'Total Revenue': 137348768.31, 'Total
Profit': 44168198.39999999}

Correlation Matrix:
               Units Sold  Total Revenue  Total Profit
Units Sold       1.000000       0.447784      0.564550
Total Revenue    0.447784       1.000000      0.897327
Total Profit     0.564550       0.897327      1.000000
```

New Section

New Section