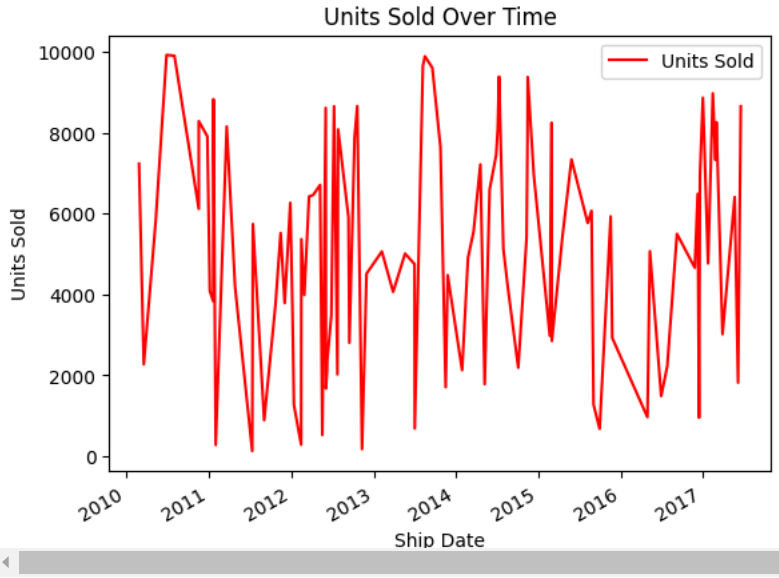
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# Load Amazon Sales data csv file
df = pd.read_csv('/content/Amazon Sales data.csv')
df
```

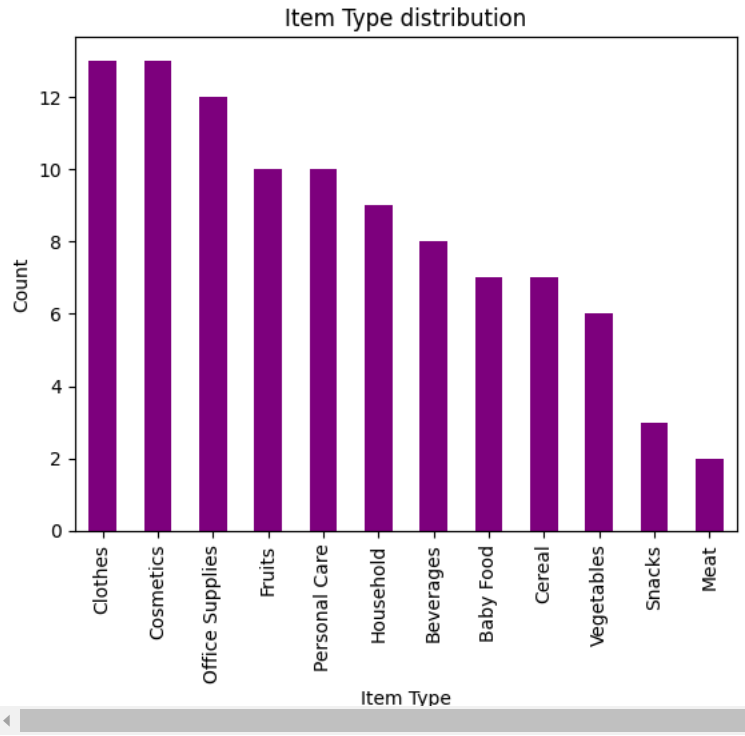
	Region	Country	Item Type	Sales Channel	Order Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Total Revenue	Total Cost
0	Australia and Oceania	Tuvalu	Baby Food	Offline	H	5/28/2010	669165933	6/27/2010	9925	255.28	159.42	2533654.00	1582243.50
1	Central America and the Caribbean	Grenada	Cereal	Online	C	8/22/2012	963881480	9/15/2012	2804	205.70	117.11	576782.80	328376.44
2	Europe	Russia	Office Supplies	Offline	L	5/2/2014	341417157	5/8/2014	1779	651.21	524.96	1158502.59	933903.84
3	Sub-Saharan Africa	Sao Tome and Principe	Fruits	Online	C	6/20/2014	514321792	7/5/2014	8102	9.33	6.92	75591.66	56065.84
4	Sub-Saharan Africa	Rwanda	Office Supplies	Offline	L	2/1/2013	115456712	2/6/2013	5062	651.21	524.96	3296425.02	2657347.52
...	...	...	...	...	...	...	...	...	...	...	...	...	...
95	Sub-Saharan Africa	Mali	Clothes	Online	M	7/26/2011	512878119	9/3/2011	888	109.28	35.84	97040.64	31825.92
96	Asia	Malaysia	Fruits	Offline	L	11/11/2011	810711038	12/28/2011	6267	9.33	6.92	58471.11	43367.64

```
# Line plot of Units Sold Over Time
df['Ship Date'] = pd.to_datetime(df['Ship Date'])
df.plot(kind = 'line', x = 'Ship Date', y = 'Units Sold', color = 'red')
plt.title('Units Sold Over Time')
plt.xlabel('Ship Date')
plt.ylabel('Units Sold')
plt.show()
```

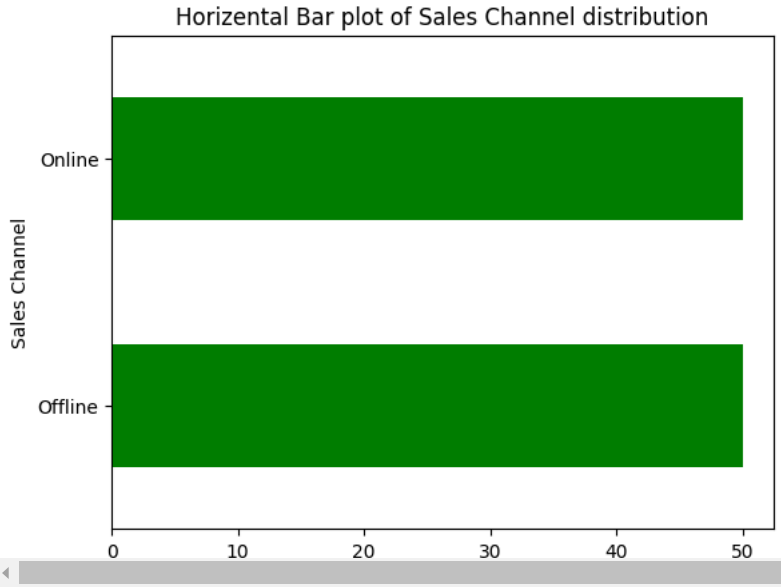



```
# Bar plot of Item Type distribution
df['Item Type'].value_counts().plot(kind='bar', color = 'purple'
plt.title('Item Type distribution')
plt.xlabel('Item Type')
plt.ylabel('Count')
```

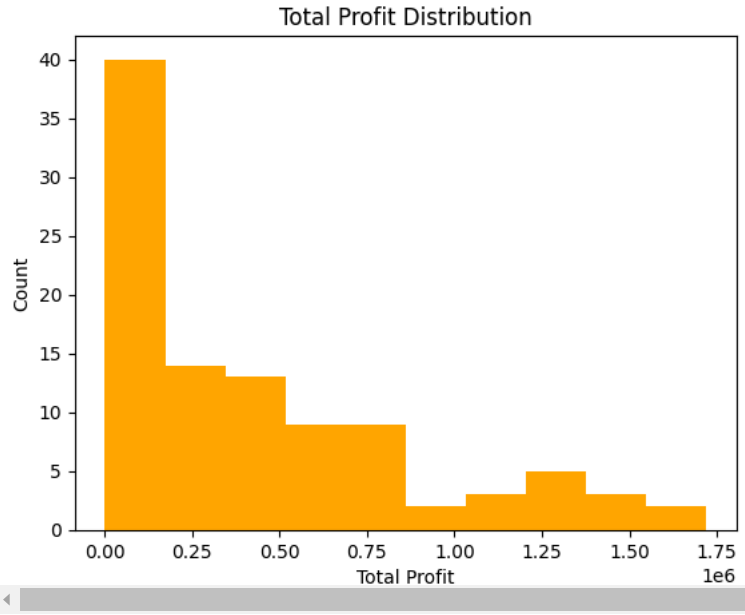
```
plt.show()
```



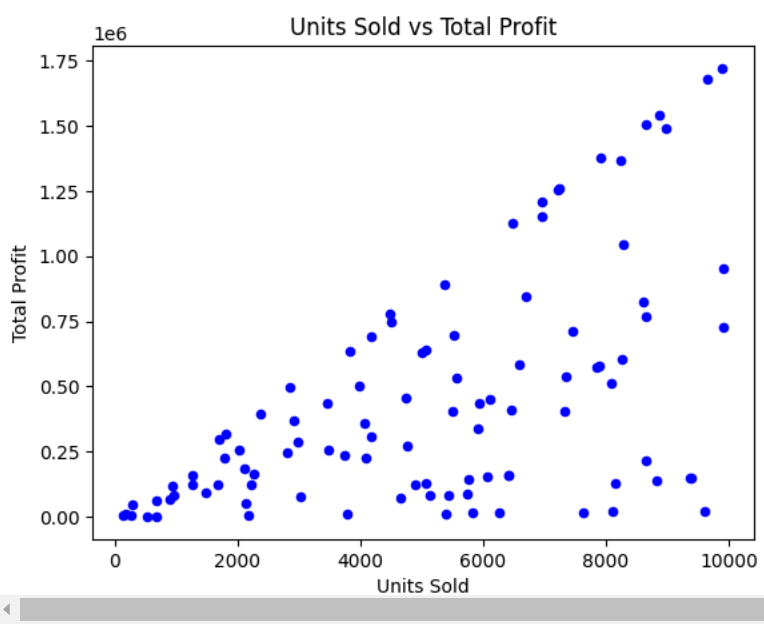

```
# Horizental Sales Channel Distribution
df['Sales Channel'].value_counts().plot(kind='barh', color = 'green')
plt.title('Horizental Bar plot of Sales Channel distribution')
plt.show()
```



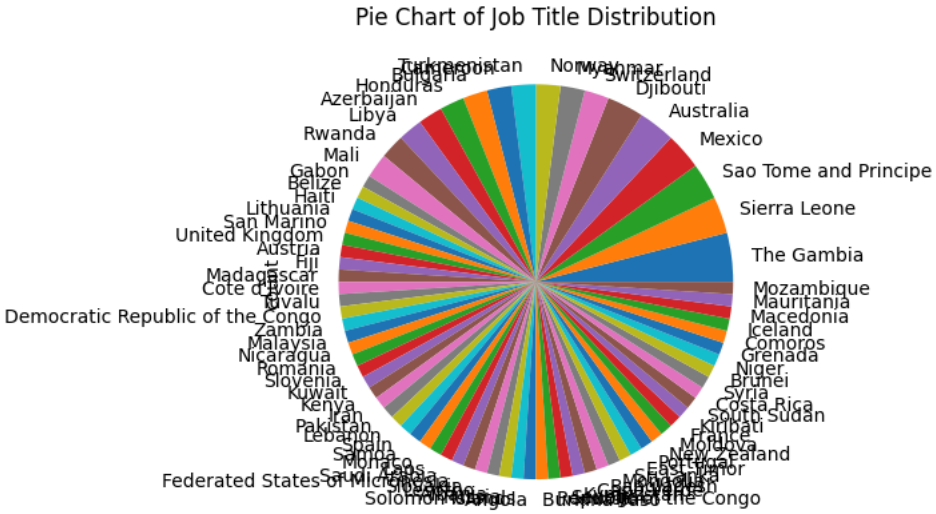

```
# Histogram of Total Profit distribution
df['Total Profit'].plot(kind="hist", color='orange')
plt.title('Total Profit Distribution')
plt.xlabel('Total Profit')
plt.ylabel('Count')
plt.show()
```



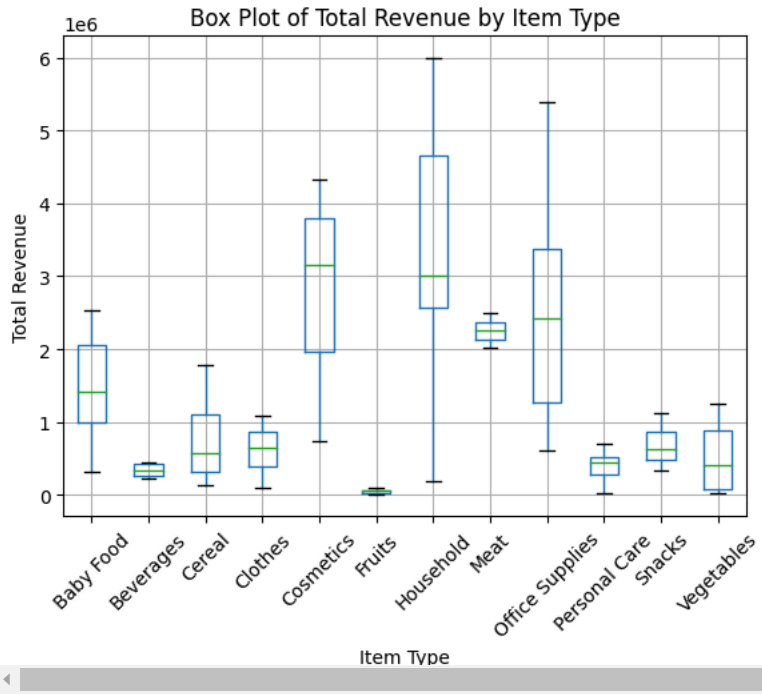

```
# Scatter plot of Units Sold vs Total Profit
df.plot(kind = 'scatter', x = 'Units Sold', y = 'Total Profit', color = 'blue')
plt.title('Units Sold vs Total Profit')
plt.xlabel('Units Sold')
plt.ylabel('Total Profit')
plt.show()
```



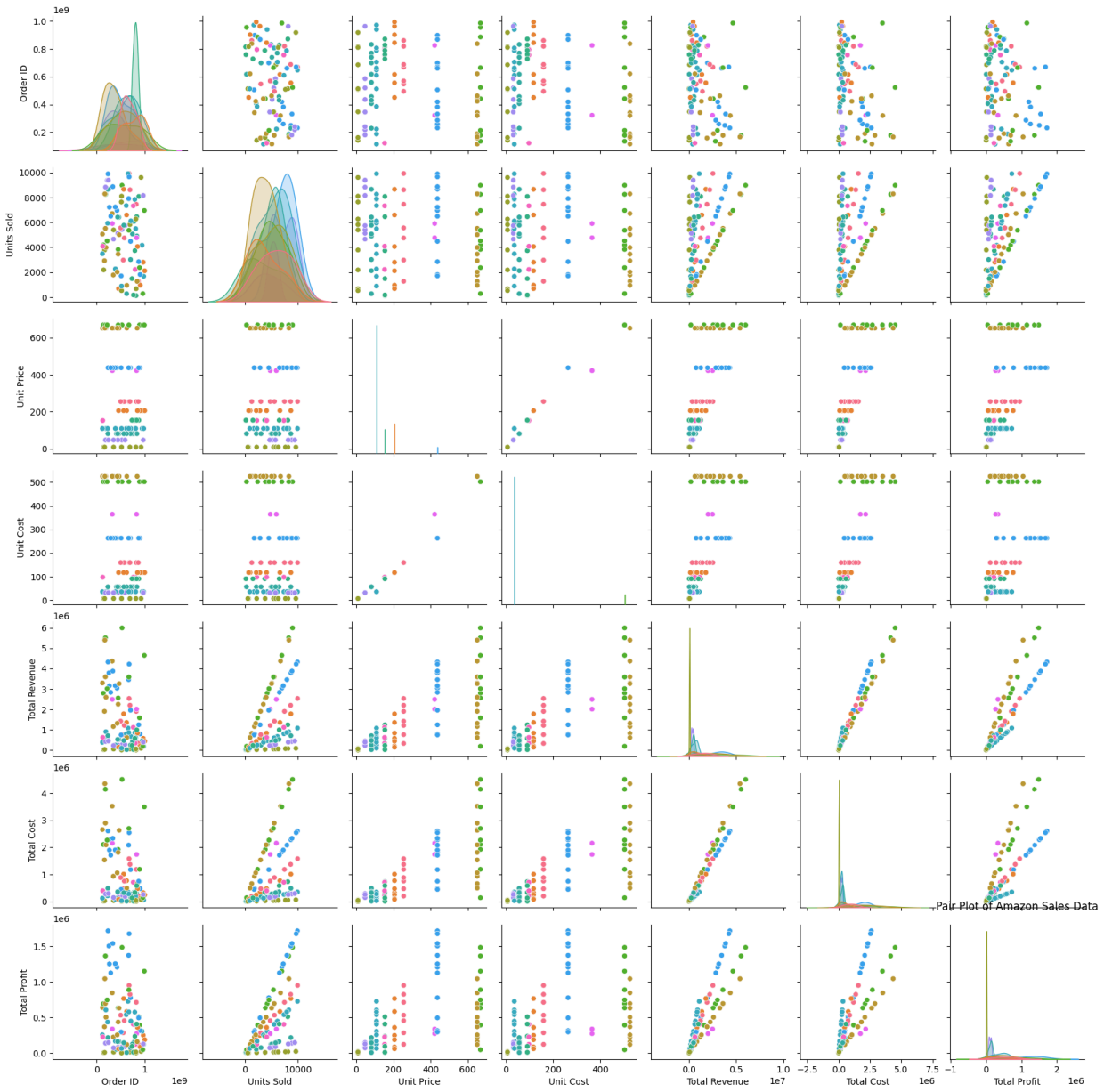

```
# Pie chart of Country Distribution
df['Country'].value_counts().plot(kind="pie")
plt.title("Pie Chart of Country Distribution")
plt.show()
```




```
# Box plot of Total Revenue grouped by Item Type
df.boxplot(column='Total Revenue', by='Item Type')
plt.title("Box Plot of Total Revenue by Item Type")
plt.suptitle("")  # Suppresses the default subtitle added by pandas
plt.xticks(rotation=45)  # Rotate x-axis labels for better readability
plt.xlabel("Item Type")
plt.ylabel("Total Revenue")
plt.show()
```




```
# pairPlot
sns.pairplot(df, hue = 'Item Type')
plt.title('Pair Plot of Amazon Sales Data')
plt.show()
```


Order ID
Units Sold
Unit Price
Unit Cost
Total Revenue
Total Cost
Total Profit
1e9
1e6
1e7
Item Type
Baby Food
Cereal
Office Supplies
Fruits
Household
Vegetables
Personal Care
Clothes
Cosmetics
Beverages
Meat
Snacks
Pair Plot of Amazon Sales Data