

```
In [1]: import pandas as pd
```

```
In [5]: data=pd.read_csv("Superstore.csv",encoding= "ISO-8859-1")
```

```
In [7]: null_values = data.isnull().sum()
data = data.drop_duplicates()
```

```
In [8]: data['Order Date'] = pd.to_datetime(data['Order Date'])
data['Order Month'] = data['Order Date'].dt.month
most_ordered_month = data['Order Month'].value_counts().idxmax()
```

```
In [10]: data['Order Day'] = data['Order Date'].dt.day_name()
most_ordered_day_of_week = data['Order Day'].value_counts().idxmax()
```

```
In [11]: orders_trend = data['Order Date'].value_counts().sort_index()
```

```
In [12]: most_ordered_month
```

```
Out[12]: 11
```

```
In [13]: most_ordered_day_of_week
```

```
Out[13]: 'Monday'
```

```
In [14]: orders_trend
```

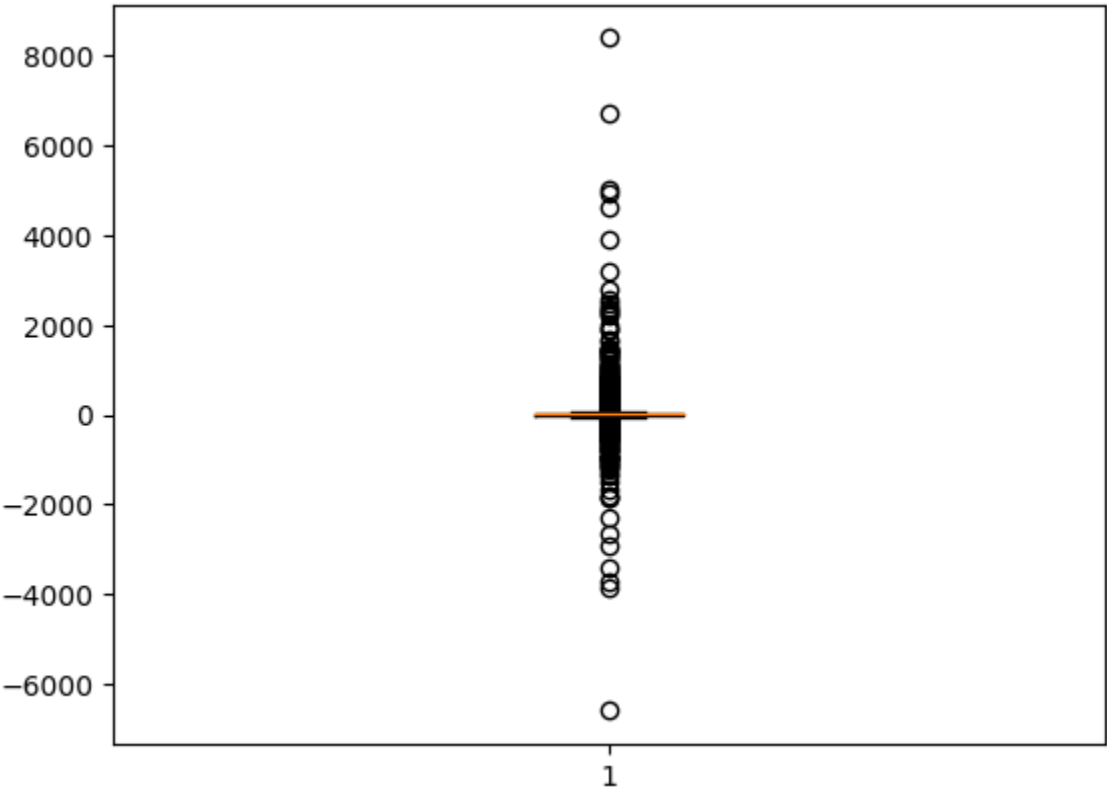
```
Out[14]: 2014-01-03      1
2014-01-04      3
2014-01-05      1
2014-01-06      9
2014-01-07      2
...
2017-12-26      4
2017-12-27      2
2017-12-28     19
2017-12-29     12
2017-12-30      7
Name: Order Date, Length: 1237, dtype: int64
```

```
In [15]: data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 9994 entries, 0 to 9993
Data columns (total 23 columns):
#   Column                Non-Null Count  Dtype
---  -
0   Row ID                9994 non-null  int64
1   Order ID              9994 non-null  object
2   Order Date            9994 non-null  datetime64[ns]
3   Ship Date             9994 non-null  object
4   Ship Mode             9994 non-null  object
5   Customer ID           9994 non-null  object
6   Customer Name         9994 non-null  object
7   Segment               9994 non-null  object
8   Country               9994 non-null  object
9   City                  9994 non-null  object
10  State                 9994 non-null  object
11  Postal Code           9994 non-null  int64
12  Region                9994 non-null  object
13  Product ID            9994 non-null  object
14  Category              9994 non-null  object
15  Sub-Category          9994 non-null  object
16  Product Name          9994 non-null  object
17  Sales                 9994 non-null  float64
18  Quantity              9994 non-null  int64
19  Discount              9994 non-null  float64
20  Profit                9994 non-null  float64
21  Order Month           9994 non-null  int64
22  Order Day             9994 non-null  object
dtypes: datetime64[ns](1), float64(3), int64(4), object(15)
memory usage: 1.8+ MB
```

```
In [17]: import matplotlib.pyplot as plt
plt.boxplot(data["Profit"])
```

```
Out[17]: {'whiskers': [<matplotlib.lines.Line2D at 0x1ffd27af490>,
<matplotlib.lines.Line2D at 0x1ffd27c0210>],
'caps': [<matplotlib.lines.Line2D at 0x1ffd27c0d90>,
<matplotlib.lines.Line2D at 0x1ffd27c1a90>],
'boxes': [<matplotlib.lines.Line2D at 0x1ffd26e6b50>],
'medians': [<matplotlib.lines.Line2D at 0x1ffd27c2690>],
'fliers': [<matplotlib.lines.Line2D at 0x1ffd27c2bd0>],
'means': []}
```



```
In [18]: orders_trend = data['Order Date'].value_counts().sort_index()
```

```
In [20]: data.to_csv('Cleaned_Superstore.csv')
```

```
In [ ]:
```