

Gourav Verma

Week 11-12

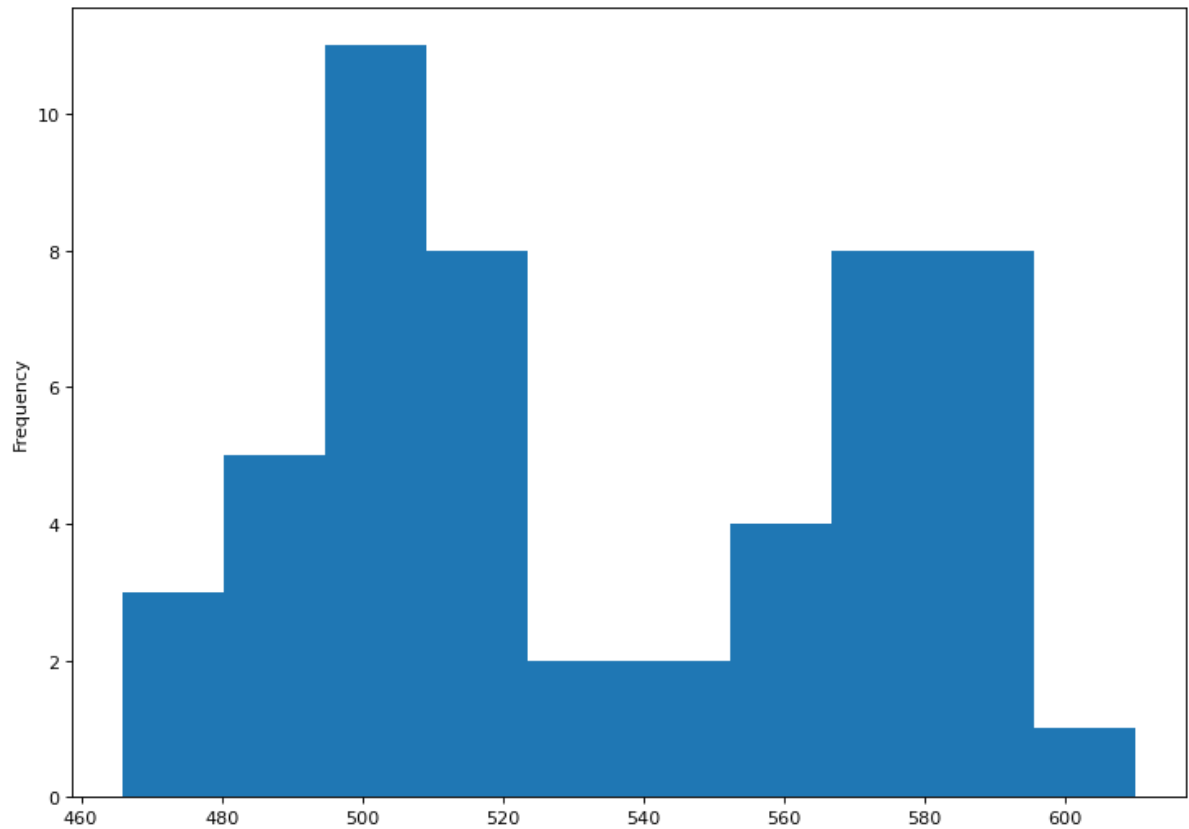
Histogram Box-Plot Bullet Chart - Using Python

```
In [2]: import matplotlib
import plotly
import seaborn as sns
import matplotlib.pyplot as plt
from matplotlib.pyplot import figure
from matplotlib.ticker import FuncFormatter
import numpy as np
import pandas as pd
import xlrd
import squarify
#from plotnine import*
import plotly.graph_objects as go
import statistics
```

## Histogram

```
In [3]: data = pd.read_csv('education.csv')
```

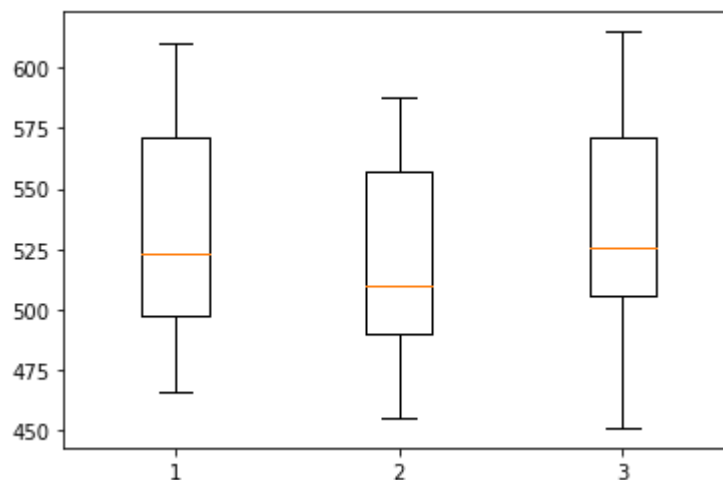
```
In [4]: figure(num=None, figsize=(11, 8), dpi=80)
data['reading'].plot.hist()
plt.color = 'bold'
plt.show()
```



## Box Plot

```
In [5]: x = [data['reading'], data['writing'], data['math']]
plt.boxplot(x)

plt.show()
```



**Bullet Chart**

```
In [6]: fig = go.Figure()

fig.add_trace(go.Indicator(
    mode= 'number+gauge+delta',
    gauge = {'shape': "bullet",
             'bar':{'color':'blue'}},
    value = statistics.mean(data['reading']),
    delta = {'reference': 600},
    domain = {'x': [0.25, 1], 'y': [0.1, 0.35]},
    title = {'text': "Reading"}))

fig.add_trace(go.Indicator(
    mode= 'number+gauge+delta',
    gauge = {'shape': "bullet",
             'bar':{'color':'green'},
             'axis':{'ticks':'',
                     'visible':False}},
    value = statistics.mean(data['writing']),
    delta = {'reference': 600},
    domain = {'x': [0.25, 1], 'y': [0.4, 0.65]},
    title = {'text': "Writing"}))

fig.add_trace(go.Indicator(
    mode= 'number+gauge+delta',
    gauge = {'shape': "bullet",
             'bar':{'color':'red'},
             'axis': {'ticks': '',
                     'visible': False}},
    value = statistics.mean(data['math']),
    delta = {'reference': 600},
    domain = {'x': [0.25, 1], 'y': [0.7, 0.95]},
    title = {'text': "Math"}))

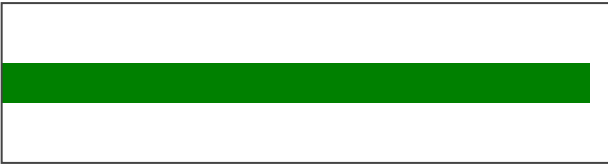
fig.update_layout(height = 400,margin = {'t':0,'r':100, 'l':100})

fig.show()
```

Math



Writing



Python



In [ ]: