

```
In [2]: import numpy as np
import pandas as pd
import statistics as st
import matplotlib.pyplot as plt
from scipy.stats import skew
from scipy.stats import kurtosis
```

```
In [3]: gdp_lab= pd.read_csv("GDP_BinhQuan.csv")
gdp_lab
```

```
Out[3]:
```

	Year	GDP
0	2009	1132.0
1	2010	1234.0
2	2011	1443.0
3	2012	1655.0
4	2013	1811.0
5	2014	1952.0
6	2015	2009.0
7	2016	2115.0
8	2017	2289.0
9	2018	2490.0
10	2019	2615.0
11	2020	2679.0

```
In [4]: #Hàm Lấy số Lượng mẫu
len(gdp_lab)
```

```
Out[4]: 12
```

```
In [5]: #Hàm tìm Lớn nhất
min(gdp_lab.GDP)
```

```
Out[5]: 1132.0
```

```
In [6]: #Hàm tìm nhỏ nhất
max(gdp_lab.GDP)
```

```
Out[6]: 2679.0
```

```
In [7]: #Tính trung bình
st.mean(gdp_lab.GDP)
```

```
Out[7]: 1952.0
```

```
In [11]: #Tính Trung Vị  
st.median(gdp_lab.GDP)
```

Out[11]: 1980.5

```
In [12]: #Tính Phương sai  
st.variance(gdp_lab.GDP)
```

Out[12]: 268729.45454545453

```
In [13]: #Tính độ Lệch chuẩn  
st.stdev(gdp_lab.GDP)
```

Out[13]: 518.3912176584925

```
In [14]: #Tính CV  
cv = st.stdev(gdp_lab.GDP)/st.mean(gdp_lab.GDP)  
cv
```

Out[14]: 0.2655692713414408

```
In [8]: skew(gdp_lab.GDP)
```

Out[8]: -0.14191111857131028

```
In [9]: kurtosis(gdp_lab.GDP)
```

Out[9]: -1.127997700241863

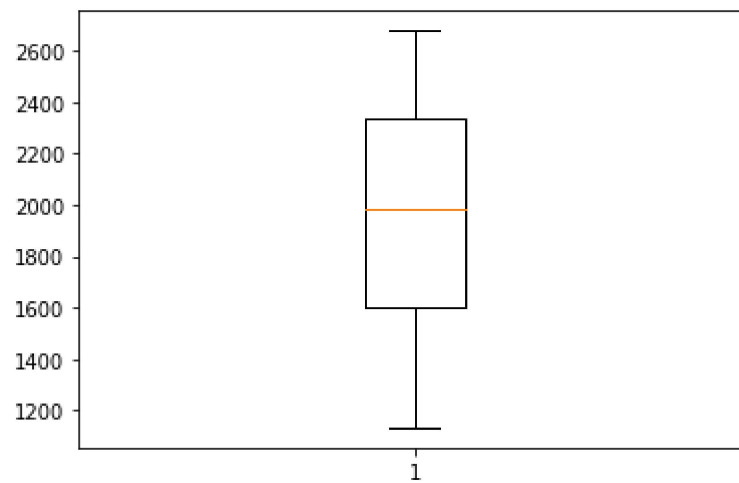
```
In [39]: np.quantile(gdp_lab.GDP,0.25)
```

Out[39]: 1602.0

```
In [41]: import matplotlib.pyplot as plt
```

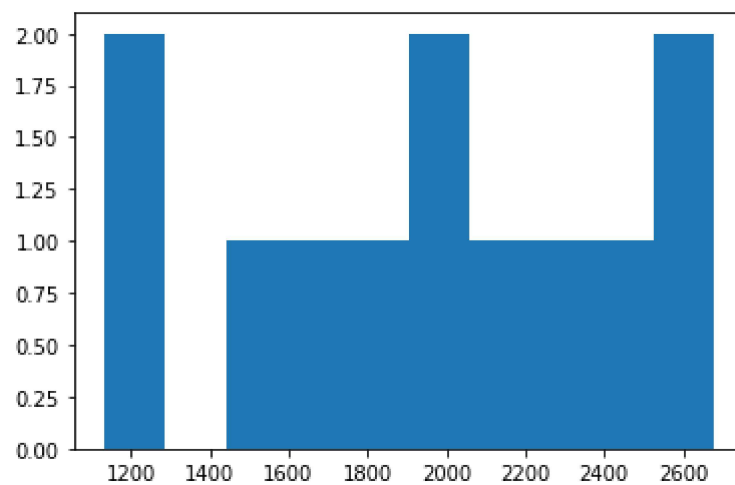
```
In [43]: # Creating plot
plt.boxplot(gdp_lab.GDP)

# show plot
plt.show()
```



```
In [44]: # Creating plot
plt.hist(gdp_lab.GDP)

# show plot
plt.show()
```



```
In [ ]:
```