

1.Import libraries

```
In [1]: import pandas as pd
        from scipy import stats
        import warnings
        warnings.filterwarnings("ignore")
        import numpy as np
```

2.import Dataset

```
In [2]: glaxo=pd.read_csv("GLAXO.csv")
        beml=pd.read_csv('BEML.csv')
```

3.Data Understanding

```
In [3]: beml=beml[['Date','Close']]
        glaxo=glaxo[['Date','Close']]
```

```
In [4]: beml['gain']=beml.Close.pct_change( periods=1)
        glaxo['gain']=glaxo.Close.pct_change( periods=1)
```

```
In [5]: beml=beml.dropna()
        glaxo=glaxo.dropna()
```

1.Normal distribution

```
In [6]: # if data is more then 30 then t dist is equal to std value.
        #we just change norm to t to find 95%confidence interval.
```

```
In [7]: np.round(stats.norm.interval(0.95,beml.gain.mean(),beml.gain.std()),4)
```

```
Out[7]: array([-0.0515,  0.0521])
```

```
In [8]: np.round(stats.norm.interval(0.95,glaxo.gain.mean(),glaxo.gain.std()),4)
```

```
Out[8]: array([-0.0258,  0.0266])
```

2. T distribution

```
In [9]: np.round(stats.t.interval(0.95,1737,beml.gain.mean(),beml.gain.std()),4)
        #we add degree of freedom 1737 and use t instead of norm
```

```
Out[9]: array([-0.0516,  0.0521])
```

```
In [10]: np.round(stats.t.interval(0.95,1737,glaxo.gain.mean(),glaxo.gain.std()),4)
```

```
Out[10]: array([-0.0258,  0.0266])
```