```
In [1]: import pandas as pd
        import numpy as np
        from scipy import stats
        from scipy.stats import norm
```

```
In [2]: # load the dataset
        data = pd.read_csv('LabTAT.csv')
        data.head()
```

Out[2]:

	Laboratory 1	Laboratory 2	Laboratory 3	Laboratory 4
0	185.35	165.53	176.70	166.13
1	170.49	185.91	198.45	160.79
2	192.77	194.92	201.23	185.18
3	177.33	183.00	199.61	176.42
4	193.41	169.57	204.63	152.60

```
In [3]: # Anova ftest statistics: stats.f_oneway(column-1,column-2,column-3,column-4)
        p_value=stats.f_oneway(data.iloc[:,0],data.iloc[:,1],data.iloc[:,2],data.iloc[:,3
        p_value
```

Out[3]: F_onewayResult(statistic=118.70421654401437, pvalue=2.1156708949992414e-57)

```
In [4]: p_value[1]  # compare it with α = 0.05
```

Out[4]: 2.1156708949992414e-57

```
In [ ]:
```