

```
In [2]: import pandas as pd  
        from scipy import stats
```

```
In [5]: fabric = pd.read_excel("Fabric data.xlsx")  
        fabric
```

Out[5]:

	Fabric_length
0	151.2
1	160.3
2	147.5
3	149.2
4	159.2
5	155.6
6	148.1
7	154.8
8	156.8
9	167.5
10	164.5
11	147.9
12	154.1
13	159.4
14	147.5
15	148.2
16	154.2
17	148.1
18	163.1
19	155.2
20	154.6
21	155.4
22	158.2
23	157.6
24	158.4

	Fabric_length
0	151.2
1	160.3
2	147.5
3	149.2
4	159.2
5	155.6
6	148.1
7	154.8
8	156.8
9	167.5
10	164.5
11	147.9
12	154.1
13	159.4
14	147.5
15	148.2
16	154.2
17	148.1
18	163.1
19	155.2
20	154.6
21	155.4
22	158.2
23	157.6
24	158.4

```
In [6]: fabric.shape
```

Out[6]: (25, 1)

```
In [8]: fabric.mean()
```

```
Out[8]: Fabric_length    155.064  
dtype: float64
```

```
In [10]: stats.ttest_1samp(fabric,155.064)
```

```
Out[10]: Ttest_1sampResult(statistic=array([0.]), pvalue=array([1.]))
```

```
In [11]: 1-stats.t.cdf(0, 25)
```

```
Out[11]: 0.5
```

```
In [ ]:
```