

```
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('Cutlets.csv')
data.head()
```

```
Out[2]:
```

	Unit A	Unit B
0	6.8090	6.7703
1	6.4376	7.5093
2	6.9157	6.7300
3	7.3012	6.7878
4	7.4488	7.1522

```
In [3]: unitA=pd.Series(data.iloc[:,0])
unitA
```

```
Out[3]:
```

0	6.8090
1	6.4376
2	6.9157
3	7.3012
4	7.4488
5	7.3871
6	6.8755
7	7.0621
8	6.6840
9	6.8236
10	7.3930
11	7.5169
12	6.9246
13	6.9256
14	6.5797
15	6.8394
16	6.5970
17	7.2705
18	7.2828
19	7.3495
20	6.9438
21	7.1560
22	6.5341
23	7.2854
24	6.9952
25	6.8568
26	7.2163
27	6.6801
28	6.9431
29	7.0852
30	6.7794
31	7.2783
32	7.1561
33	7.3943
34	6.9405

Name: Unit A, dtype: float64

```
In [4]: unitB=pd.Series(data.iloc[:,1])
```

unitB	
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Out[4]: 0      6.7703
        1      7.5093
        2      6.7300
        3      6.7878
        4      7.1522
        5      6.8110
        6      7.2212
        7      6.6606
        8      7.2402
        9      7.0503
       10      6.8810
       11      7.4059
       12      6.7652
       13      6.0380
       14      7.1581
       15      7.0240
       16      6.6672
       17      7.4314
       18      7.3070
       19      6.7478
       20      6.8889
       21      7.4220
       22      6.5217
       23      7.1688
       24      6.7594
       25      6.9399
       26      7.0133
       27      6.9182
       28      6.3346
       29      7.5459
       30      7.0992
       31      7.1180
       32      6.6965
       33      6.5780
       34      7.3875
Name: Unit B, dtype: float64
```

```
In [5]: # 2-sample 2-tail ttest:  stats.ttest_ind(array1,array2)      # ind -> independent s
p_value=stats.ttest_ind(unitA,unitB)
p_value
```

```
Out[5]: Ttest_indResult(statistic=0.7228688704678061, pvalue=0.4722394724599501)
```

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In [6]: p_value[1]      # 2-tail probability
```

```
Out[6]: 0.4722394724599501
```

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In [ ]:
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In [ ]:
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