

Python 3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]  
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IPython 7.31.1 -- An enhanced Interactive Python.

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

```
In [2]: n1= np.random.normal(0,1,1001)
```

```
In [3]: n2= np.random.normal(0,1,1001)
```

```
In [4]: from scipy.stats import pearsonr
```

```
In [5]: re, b = pearsonr(n1, n2)
...: print("Pearson correlation coefficient is {}".format(re))
...: print("p-value is {}".format(b))
```

Pearson correlation coefficient is 0.01630235367816129  
p-value is 0.6064320186923496

```
In [6]: from scipy.stats import ttest_ind
...: stat, p_t = ttest_ind(n1, n2)
...: print("p-value from t-distribution is {}".format(p_t))
```

p-value from t-distribution is 0.5331362876360493

```
In [7]:
```