

```
In [1]: from scipy.stats import ttest_ind
        from scipy.stats import ttest_1samp
        import numpy as np
        sample1 = [33, 30, 26, 22, 37, 34]
        sample2 = [22, 29, 25, 23]
```

```
In [2]: stat, p = ttest_ind(sample1, sample2)
```

```
In [3]: print('P Value is : ',p)
```

P Value is : 0.1073888420024464

```
In [4]: sample3 = [33, 30, 26, 22, 37, 34, 22, 29, 25, 23]
```

```
In [5]: print('Mean of sample3 is : ', np.mean(sample3))
```

Mean of sample3 is : 28.1

```
In [6]: stat, p = ttest_1samp(sample3, 30)
```

```
In [7]: print('P Value is : ',p)
```

P Value is : 0.2898618578220841

```
In [8]: stat, p = ttest_1samp(sample3, 28.1)
```

```
In [9]: print('P Value is : ',p)
```

P Value is : 1.0

```
In [2]: from statsmodels.stats.weightstats import ztest as ztest
```

```
In [3]: sample4 = [33, 30, 26, 22, 37, 34, 22, 29, 25, 23, 13, 14, 15, 16, 17, 18, 19, 20, 2
```

```
In [4]: print('Mean of sample4 is : ', np.mean(sample4))
```

Mean of sample4 is : 37.1

```
In [6]: ztest, p = ztest(sample4, value=30)
```

```
In [7]: print('P Value is : ',p)
```

P Value is : 0.003162922662875686

```
In [5]: sample5 = [33, 30, 26, 22, 37, 34, 22, 29, 25, 23, 13, 14, 15, 16, 17, 18, 19, 20, 2
```

```
In [6]: ztest, p = ztest(sample4, sample5,value=30)
```

In [7]:

```
print('P Value is :',p)
```

P Value is : 1.1626254710641188e-18

In []: