

In [1]:

```
import pandas as pd
import numpy as np
from scipy import stats
```

executed in 1.56s, finished 19:47:20 2021-11-26

In [6]:

```
df = pd.read_csv('BuyerRatio.csv')
```

executed in 20ms, finished 19:51:10 2021-11-26

In [3]:

df

executed in 63ms, finished 19:48:33 2021-11-26

Out[3]:

	Observed Values	East	West	North	South
0	Males	50	142	131	70
1	Females	435	1523	1356	750

In [7]:

```
stats.chi2_contingency([df["East"], df["West"], df["North"], df["South"]])
```

executed in 24ms, finished 19:54:28 2021-11-26

Out[7]:

```
(1.5959455386610577,
0.6603094907091882,
3,
array([[ 42.76531299,  442.23468701],
       [ 146.81287862, 1518.18712138],
       [ 131.11756787, 1355.88243213],
       [  72.30424052,  747.69575948]]))
```