

```
In [20]: import numpy as np
import pandas as pd
from apyori import apriori
```

```
In [47]: data = pd.read_excel('Documents/apriori_data.xlsx', header=None)
data.head()
```

Out[47]:

	0	1	2	3	4
0	Transaction ID	Wine	Chips	Bread	Milk
1	1	1	1	1	1
2	2	1	0	1	1
3	3	0	0	1	1
4	4	0	1	0	0

```
In [48]: data.shape
```

Out[48]: (7, 5)

```
In [45]: list1 = []
for i in range(0, 6):
    list1.append([str(data.values[i,j]) for j in range(0, 4)])
print(records)
```

```
[[ '1', '1', '1', '1'], [ '2', '1', '0', '1'], [ '3', '0', '0', '1'],
[ '4', '0', '1', '0'], [ '5', '1', '1', '1'], [ '6', '1', '1', '0']]
```

```
In [46]: assrules = apriori(list1, min_support = 0.33, min_confidence = 0.6,
                           min_lift = 1.01, min_length = 2)
result = list(assrules)
print(result[0])
```

```
RelationRecord(items=frozenset({'1', '0'}), support=0.5, ordered_statistics=[OrderedStatistic(items_base=frozenset({'0'}), items_add=frozenset({'1'}), confidence=1.0, lift=1.2), OrderedStatistic(items_base=frozenset({'1'}), items_add=frozenset({'0'}), confidence=0.6, lift=1.2)])
```

In [ ]: