In [43]:

```
import pandas as pd
import numpy as np

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

Out[43]:

	x	y	class
0	2	4	negative
1	4	2	negative
2	4	4	positive
3	4	6	negative
4	6	2	positive
5	6	4	negative

In [36]:

```
x = df.iloc[:,:-1].values
y = df.iloc[:,2].values
```

In [37]:

```
x
```

Out[37]:

```
array([[2, 4],
       [4, 2],
       [4, 4],
       [4, 6],
       [6, 2],
       [6, 4]])
```

In [38]:

```
y
```

Out[38]:

```
array(['negative', 'negative', 'positive', 'negative', 'positive',
       'negative'], dtype=object)
```

In [39]:

```
from sklearn.neighbors import KNeighborsClassifier as knn

cf = knn(n_neighbors=3,p=2, metric='euclidean')
cf.fit(x,y)
```

Out[39]:

```
KNeighborsClassifier(metric='euclidean', n_neighbors=3)
```

In [40]:

```
x_test = np.array([6,6])
y_pred = cf.predict([x_test])
y_pred
```

Out[40]:

```
array(['negative'], dtype=object)
```

In [41]:

```
cf = knn(n_neighbors=3, weights="distance",p=2, metric='euclidean')
cf.fit(x,y)
```

Out[41]:

```
KNeighborsClassifier(metric='euclidean', n_neighbors=3, weights='distance')
```

In [42]:

```
x_test = np.array([6,6])
y_pred = cf.predict([x_test])
y_pred
```

Out[42]:

```
array(['negative'], dtype=object)
```

In [ ]:

```

```