In [2]:
```
import numpy as np
import pandas as pd
from sklearn.neighbors import KNeighborsClassifier
from matplotlib import pyplot as plt
```

In [4]:
```
data={
      "BP":[120,145,190,167,146,170],
      "Cholestral":[200,345,56,345,234,453,],
      "HeartRisk":[0,0,0,1,1,1]
     }
```

In [6]:
```
df=pd.DataFrame(data)
print(df)
```

```
    BP  Cholestral  HeartRisk
0  120         200          0
1  145         345          0
2  190          56          0
3  167         345          1
4  146         234          1
5  170         453          1
```

In [11]:
```
X=df[['BP','Cholestral']]
Y=df['HeartRisk']
```

In [16]:
```
k=3
Knn=KNeighborsClassifier(n_neighbors=k)
Knn.fit(X,Y)
```

Out[16]:

▾ KNeighborsClassifier

```
KNeighborsClassifier(n_neighbors=3)
```

In [17]:
```
new_data=np.array([[120,200]])
prediction=Knn.predict(new_data)
if prediction==0:
  print("No risk")
else:
  print("At risk")
```

```
No risk
/usr/local/lib/python3.12/dist-packages/sklearn/utils/validation.py:2739: UserW
arning: X does not have valid feature names, but KNeighborsClassifier was fitte
d with feature names
  warnings.warn(
```