```
from google.colab import drive
drive.mount('/content/drive')

import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import accuracy_score
from matplotlib import pyplot as plt

data = {
      'BP': [120,130,140,150,160,170,180,190,200,210],
      'Cholesterol': [200,220,240,260,280,300,320,340,360,380],
      'HeartRisk':[0,0,0,0,1,1,1,1,1,1] #0:No risk, 1: At risk
}

df = pd.DataFrame(data)

x = df[['BP','Cholesterol']]
y = df[['HeartRisk']]

k = 3
knn = KNeighborsClassifier(n_neighbors=k)
knn.fit(x,y)
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/neighbors/
_classification.py:215: DataConversionWarning: A column-vector y was
passed when a 1d array was expected. Please change the shape of y to
(n_samples,), for example using ravel().
  return self._fit(X, y)
```

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

```
new_data = np.array([[100,200]])
prediction = knn.predict(new_data)

if prediction[0] == 0:
  print("No risk")
else:
  print("At risk")
```

```
No risk
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/base.py:439:
UserWarning: X does not have valid feature names, but
KNeighborsClassifier was fitted with feature names
  warnings.warn(
```