```
import numpy as np
import pandas as pd
from sklearn.neighbors import KNeighborsClassifier
from matplotlib import pyplot as plt

data={
    'BP':[130,140,150,160,170,180,190,200,210,220],
    'Cholesterol':[220,240,260,280,300,320,340,360,380,400],
    'HeartRisk':[0,0,0,0,0,1,1,1,1,1]
}

df=pd.DataFrame(data)

M=df[['BP','Cholesterol']]
D=df['HeartRisk']

k=3
knn=KNeighborsClassifier(n_neighbors=k)
knn.fit(M,D)
```

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

```
new_data=np.array([[220,250]])
prediction=knn.predict(new_data)
if prediction ==0:
  print("No Risk")
else:
  print("At Risk")
```

```
No Risk
```

```
/usr/local/lib/python3.11/dist-packages/sklearn/utils/
validation.py:2739: UserWarning: X does not have valid feature names,
but KNeighborsClassifier was fitted with feature names
  warnings.warn(
```