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

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

df=pd.DataFrame(data)
print(df)
```

```
    BP  Cholesterol  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
```

```
X=df[["BP","Cholesterol"]]
Y=df["HeartRisk"]

k=3
Knn=KNeighborsClassifier(n_neighbors=k)
Knn.fit(X,Y)
```

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

```
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: UserWarning: X does not have valid feature names,
but KNeighborsClassifier was fitted with feature names
  warnings.warn(
```