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

data ={
    'BP':[120,130,140,150,160,170,180,190,200,210],
    'cholestrol':[200,220,240,260,280,300,320,340,360,380],
    'HeartRisk':[0,0,0,0,0,1,1,1,1,1]
}
df = pd.DataFrame(data)

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

K=3
Knn=KNeighborsClassifier(n_neighbors=K)
Knn.fit(x,y)
```

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

```
new_data=np.array([[210,250]])
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(
```