```
import pandas as pd
import numpy as np
from sklearn.linear_model import LogisticRegression

dia=pd.read_csv("/content/drive/MyDrive/Logestic/dataset.csv")
dia.head()
```


```
{"summary":"{\n  \"name\": \"dia\",\n  \"rows\": 3000,\n  \"fields\":
[\n    {\n      \"column\": \"GENDER\",\n      \"properties\": {\n
\"dtype\": \"category\",\n        \"num_unique_values\": 2,\n
\"samples\": [\n          \"F\",\n          \"M\"\n        ],\n
\"semantic_type\": \"\",\n        \"description\": \"\"\n      }\
n    },\n    {\n      \"column\": \"AGE\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 14,\n        \"min\": 30,\n
\"max\": 80,\n        \"num_unique_values\": 51,\n        \"samples\":
[\n          73,\n          52\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"SMOKING\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          2,\n          1\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"YELLOW_FINGERS\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          2,\n          1\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"ANXIETY\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          2,\n          1\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"PEER_PRESSURE\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"CHRONIC_DISEASE\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"FATIGUE\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          2,\n          1\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"ALLERGY\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
```

```
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"WHEEZING\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"ALCOHOL_CONSUMING\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"COUGHING\",\n      \"properties\": {\n        \"dtype\":
\"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"SHORTNESS_OF_BREATH\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"SWALLOWING_DIFFICULTY\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          1,\n          2\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"CHEST_PAIN\",\n      \"properties\": {\n
\"dtype\": \"number\",\n        \"std\": 0,\n        \"min\": 1,\n
\"max\": 2,\n        \"num_unique_values\": 2,\n        \"samples\":
[\n          2,\n          1\n        ],\n        \"semantic_type\":
\"\",\n        \"description\": \"\"\n      }\n    },\n    {\n
\"column\": \"LUNG_CANCER\",\n      \"properties\": {\n
\"dtype\": \"category\",\n        \"num_unique_values\": 2,\n
\"samples\": [\n          \"YES\",\n          \"NO\"\n        ],\n
\"semantic_type\": \"\",\n        \"description\": \"\"\n      }\
n    }\n  ]\n}","type":"dataframe","variable_name":"dia"}
```


```
ind=dia[["SMOKING","PEER_PRESSURE"]]
oud=dia["LUNG_CANCER"]

Logr=LogisticRegression()

Logr.fit(ind,oud)

LogisticRegression()

smoke=int(input("Enter smoking value:"))
peerpressure=int(input("Enter the peerpressure:"))
```

```
pred=Logr.predict([[smoke,peerpressure]])
print(pred)
```

```
Enter smoking value:2
Enter the peerpressure:1
['YES']

/usr/local/lib/python3.12/dist-packages/sklearn/utils/
validation.py:2739: UserWarning: X does not have valid feature names,
but LogisticRegression was fitted with feature names
  warnings.warn(
```