

```
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
import matplotlib.pyplot as plt
import numpy as np # linear algebra
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)
import seaborn as sns
```

```
pwd
```

```
df = pd.read_csv('../input/heartcsv/Heart.csv')
```

```
df.head()
```

```
df.shape #303, 15
```

```
df.isnull().sum()
```

```
df.count()
```

```
df.info()
```

```
df.dtypes
```

```
df==0
```

```
df[df==0]
```

```
(df == 0).sum()
```

```
np.mean(df['Age'])
```

```
df.Age.mean()
```

```
df.columns
```

```
data = df[['Age', 'Sex', 'ChestPain', 'RestBP', 'Chol']]
```

```
train,test = train_test_split(data,test_size=0.25,random_state=1)
```

```
train.shape
```

```
test.shape
```

```
actual = np.concatenate((np.ones(45),np.zeros(450),np.ones(5)))
actual
```

```
predicted = np.concatenate((np.ones(100),np.zeros(400)))
predicted
```

```
type(predicted)
```

```
from sklearn.metrics import ConfusionMatrixDisplay
```

```
from sklearn.metrics import classification_report
from sklearn.metrics import accuracy_score
```

```
print(classification_report(actual,predicted))
```

```
accuracy_score(actual,predicted)
```