

Assignment 1 (Output)

```
[6]: # The 'r' makes it a "raw" string
df = pd.read_csv(r'C:\Users\rohit\OneDrive\Desktop\Heart.csv')
```

```
[7]: df.head()
```

```
[7]:
```

	Unnamed: 0	Age	Sex	ChestPain	RestBP	Chol	Fbs	RestECG	MaxHR	ExAng	Oldpeak	Slope	Ca	Thal	AHD	
0		1	63	1	typical	145	233	1	2	150	0	2.3	3	0.0	fixed	No
1		2	67	1	asymptomatic	160	286	0	2	108	1	1.5	2	3.0	normal	Yes
2		3	67	1	asymptomatic	120	229	0	2	129	1	2.6	2	2.0	reversable	Yes
3		4	37	1	nonanginal	130	250	0	0	187	0	3.5	3	0.0	normal	No
4		5	41	0	nontypical	130	204	0	2	172	0	1.4	1	0.0	normal	No

```
[8]: df.dtypes
```

```
[8]: Unnamed: 0      int64
Age              int64
Sex              int64
ChestPain        object
RestBP           int64
Chol             int64
Fbs              int64
RestECG          int64
MaxHR            int64
ExAng            int64
Oldpeak          float64
Slope            int64
Ca               float64
Thal             object
AHD              object
..              ..
```

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

	Unnamed: 0	Age	Sex	ChestPain	RestBP	Chol	Fbs	RestECG	MaxHR	ExAng	Oldpeak	Slope	Ca	Thal	AHD	
0		NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	0.0	NaN	NaN	0.0	NaN	NaN
1		NaN	NaN	NaN	NaN	NaN	NaN	0.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2		NaN	NaN	NaN	NaN	NaN	NaN	0.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
3		NaN	NaN	NaN	NaN	NaN	NaN	0.0	0.0	NaN	0.0	NaN	NaN	0.0	NaN	NaN
4		NaN	NaN	0.0	NaN	NaN	NaN	0.0	NaN	NaN	0.0	NaN	NaN	0.0	NaN	NaN

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

```
] : np.float64(54.43894389438944)
```

```
] : df.Age.mean()
```

```
] : np.float64(54.43894389438944)
```

```
] : df.columns
```

```
] : Index(['Unnamed: 0', 'Age', 'Sex', 'ChestPain', 'RestBP', 'Chol', 'Fbs',
         'RestECG', 'MaxHR', 'ExAng', 'Oldpeak', 'Slope', 'Ca', 'Thal', 'AHD'],
         dtype='object')
```

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

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

```
] : train.shape
```

```
] : (227, 5)
```

```
] : test.shape
```

```
] : (76, 5)
```

[illegible]

`numpy.ndarray`

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

	precision	recall	f1-score	support
0.0	0.99	0.88	0.93	450
1.0	0.45	0.90	0.60	50
accuracy			0.88	500
macro avg	0.72	0.89	0.76	500
weighted avg	0.93	0.88	0.90	500

0.88