Student Work Area

Algorithm/Flowchart/Code/Sample Outputs

In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
```

In [2]:
```
df=pd.read_csv('heart_attack_dataset.csv')
```

In [3]:
```
df.head()
```

Out[3]:

	Gender	Age	Blood Pressure (mmHg)	Cholesterol (mg/dL)	Has Diabetes	Smoking Status	Chest Pain Type	Treatment
0	Male	70.0	181.0	262.0	No	Never	Typical Angina	Lifestyle Changes
1	Female	55.0	103.0	253.0	Yes	Never	Atypical Angina	Angioplasty
2	Male	42.0	95.0	295.0	Yes	Current	Typical Angina	Angioplasty
3	Male	84.0	106.0	270.0	No	Never	Atypical Angina	Coronary Artery Bypass Graft (CABG)
4	Male	86.0	NaN	296.0	Yes	Current	Non-anginal Pain	Medication

In [4]:
```
df.shape
```

Out[4]:
```
(1005, 8)
```

In [18]:
```
df.isnull().sum()
```

Out[18]:
```
Age                       1
Blood Pressure (mmHg)     1
Cholesterol (mg/dL)       1
Has Diabetes              0
Smoking Status            0
Chest Pain Type           1
Treatment                 0
dtype: int64
```

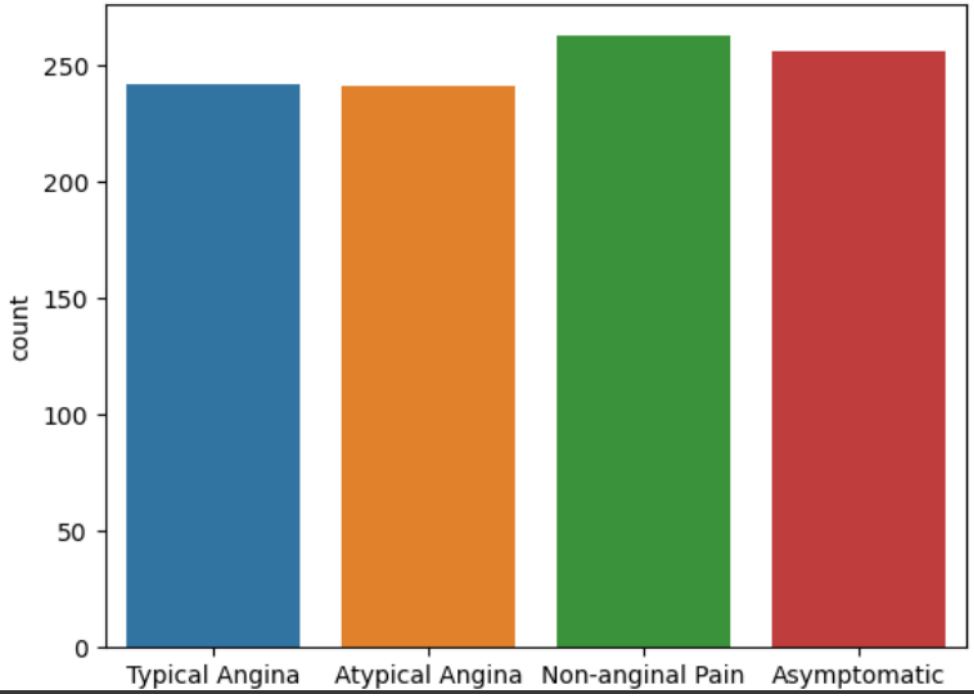
In [19]:
```
median1=df["Age"].median()
median2=df["Blood Pressure (mmHg)"].median()
median3=df["Cholesterol (mg/dL)"].median()
```

In [20]:
```
df["Age"].replace(np.nan,median1,inplace=True)
df["Blood Pressure (mmHg)"].replace(np.nan,median2,inplace=True)
df["Cholesterol (mg/dL)"].replace(np.nan,median3,inplace=True)
```

In [21]:
```
mode1=df["Chest Pain Type"].mode().values[0]
df["Chest Pain Type"]=df["Chest Pain Type"].replace(np.nan,mode1)
```

In [ ]:

[23]:
```
sns.countplot(x=df["Chest Pain Type"]);
```




```
sns.heatmap(df.corr(), annot=True, fmt='.2f')
plt.show()
```

```
C:\Users\hp\AppData\Local\Temp\ipykernel_13684\217086966.py:1: FutureWarning: The default value of numeric_only i
rr is deprecated. In a future version, it will default to False. Select only valid columns or specify the value o
to silence this warning.
  sns.heatmap(df.corr(), annot=True, fmt='.2f')
```