

In [2]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings('ignore')
```

In [4]:

```
df=pd.read_csv('Downloads/Heart_Disease_Prediction.csv')
```

In [5]:

```
df.head()
```

Out[5]:

	Age	Sex	Chest pain type	BP	Cholesterol	FBS over 120	EKG results	Max HR	Exercise angina	ST depression	Slope of ST	Number of vessels fluro
0	70	1	4	130	322	0	2	109	0	2.4	2	
1	67	0	3	115	564	0	2	160	0	1.6	2	
2	57	1	2	124	261	0	0	141	0	0.3	1	
3	64	1	4	128	263	0	0	105	1	0.2	2	
4	74	0	2	120	269	0	2	121	1	0.2	1	

In [6]:

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

Out[6]:

```
Age          0
Sex          0
Chest pain type  0
BP           0
Cholesterol  0
FBS over 120  0
EKG results  0
Max HR       0
Exercise angina  0
ST depression  0
Slope of ST  0
Number of vessels fluro  0
Thallium     0
Heart Disease  0
dtype: int64
```

In [7]:

```
print(df.info())
```

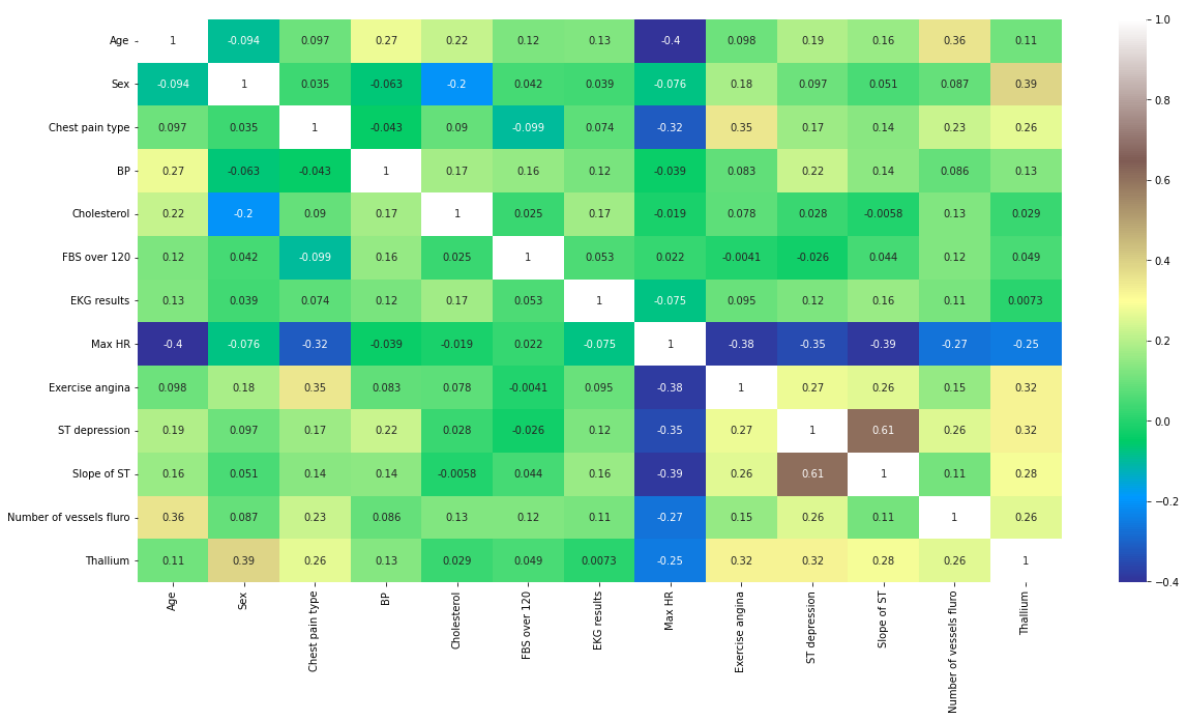
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 270 entries, 0 to 269
Data columns (total 14 columns):
#   Column                                Non-Null Count  Dtype
---  -
0   Age                                    270 non-null    int64
1   Sex                                    270 non-null    int64
2   Chest pain type                        270 non-null    int64
3   BP                                     270 non-null    int64
4   Cholesterol                            270 non-null    int64
5   FBS over 120                           270 non-null    int64
6   EKG results                            270 non-null    int64
7   Max HR                                270 non-null    int64
8   Exercise angina                        270 non-null    int64
9   ST depression                          270 non-null    float64
10  Slope of ST                            270 non-null    int64
11  Number of vessels fluro                270 non-null    int64
12  Thallium                               270 non-null    int64
13  Heart Disease                          270 non-null    object
dtypes: float64(1), int64(12), object(1)
memory usage: 29.7+ KB
None
```

In [9]:

```
plt.figure(figsize=(20,10))
sns.heatmap(df.corr(), annot=True, cmap='terrain')
```

Out[9]:

<AxesSubplot:>

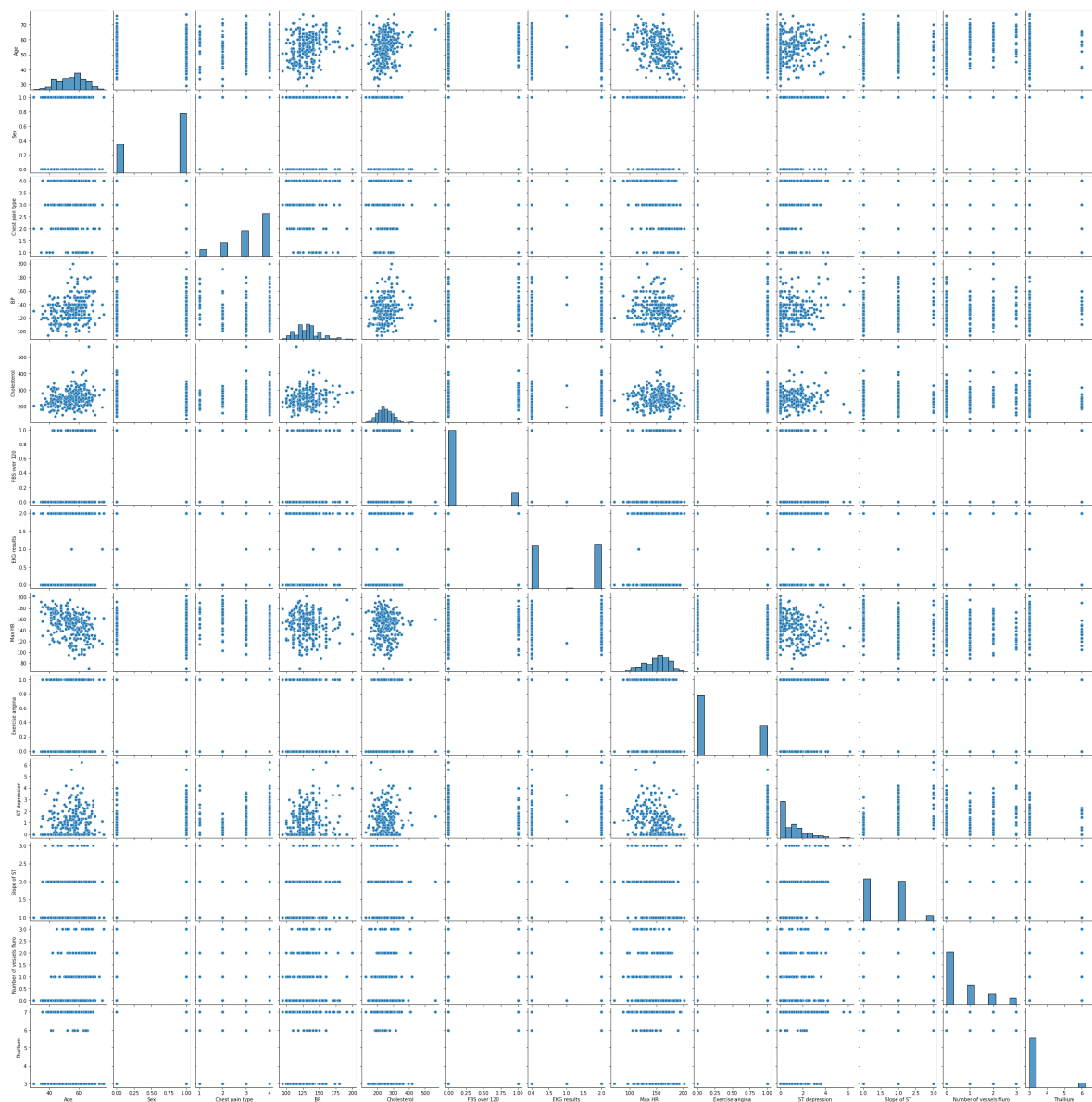


In [10]:

```
sns.pairplot(data=df)
```

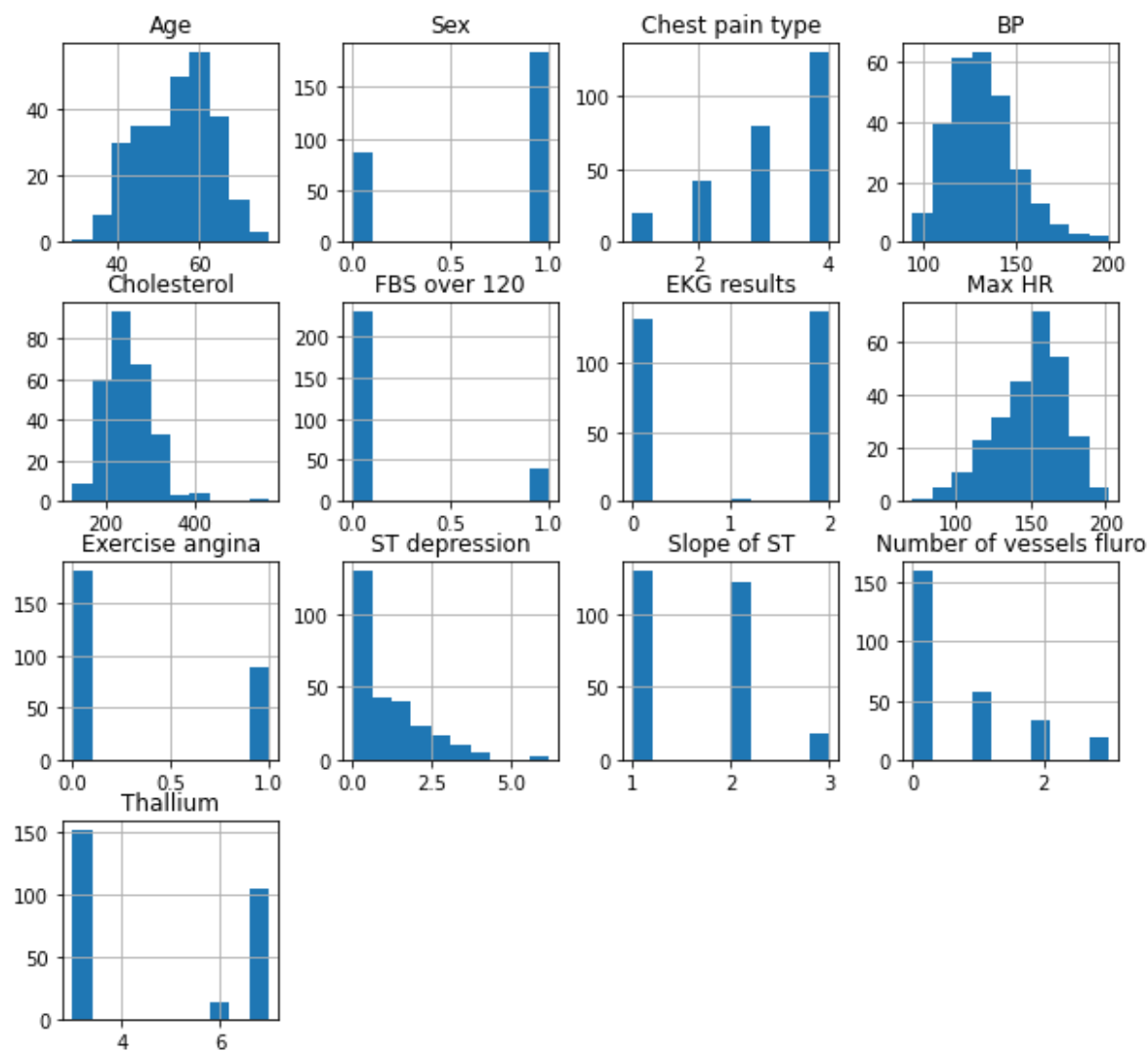
Out[10]:

<seaborn.axisgrid.PairGrid at 0x2059aec2448>



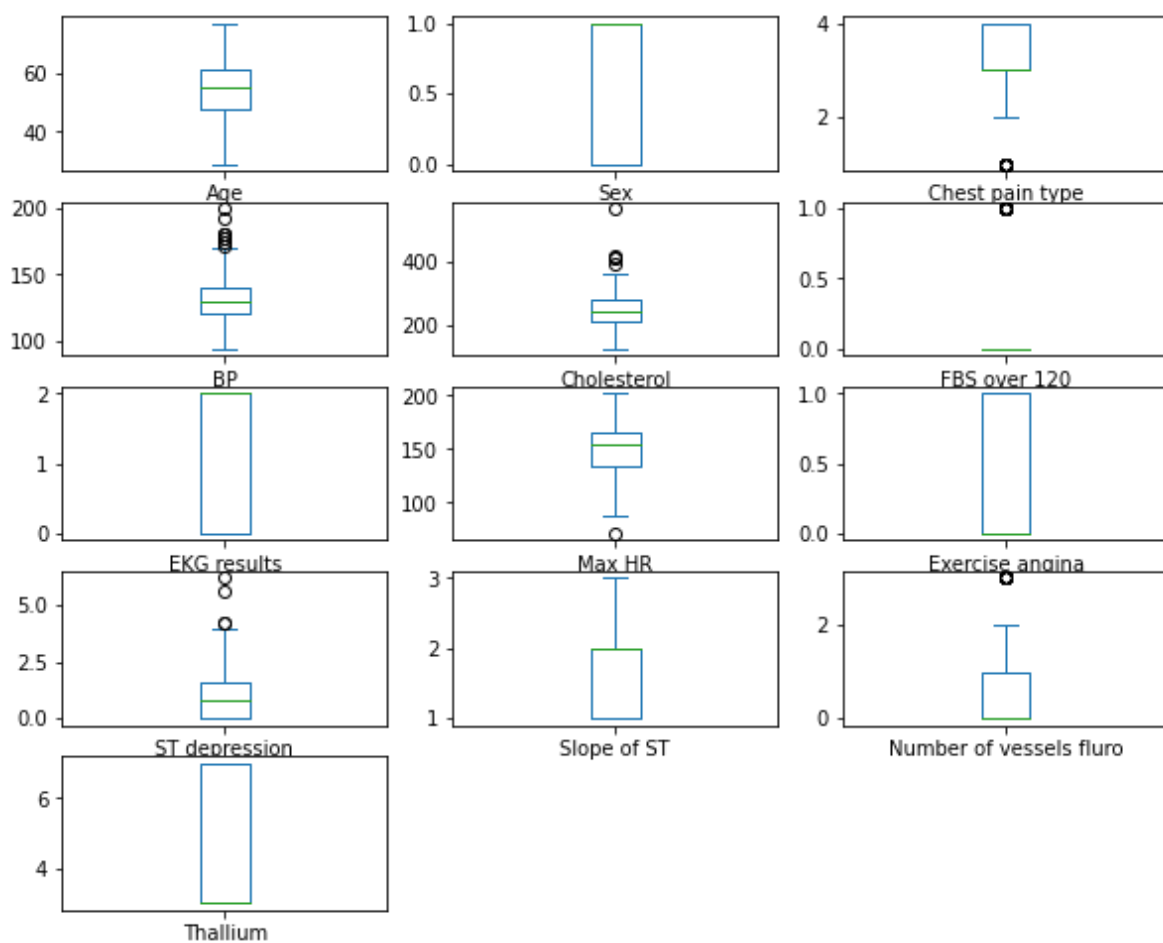
In [11]:

```
df.hist(figsize=(10,12), layout=(5,4));
```



In [13]:

```
df.plot(kind='box', subplots=True, layout=(6,3), figsize=(10,10))  
plt.show()
```



In []: