import pandas as pd

import seaborn as sns

import numpy as np

import matplotlib.pyplot as plt

import warnings

warnings.simplefilter(action='ignore', category=FutureWarning)

df = pd.read\_csv("heart.csv")

df.head()

df.info()

df.describe().T

f, ax = plt.subplots(figsize=(8, 6))

ax = sns.countplot(x="target", data=df)

plt.show()

df.plot(kind='density', subplots=True, layout=(7,2), sharex=False , figsize =(18,18))

plt.show()

df.hist(figsize = (10,10), color = "#5F9EA0")

plt.show()

df.plot(kind='box', subplots=True, layout=(7,2), sharex=False,sharey=False ,figsize =(18,18))

plt.show()

correlation = df.corr()

correlation['target'].sort\_values(ascending=False)

f, ax = plt.subplots(figsize=(10,6))

x = df['thalach']

x = pd.Series(x, name="thalach variable")

ax = sns.kdeplot(x, shade=True, color='r')

plt.show()

f, ax = plt.subplots(figsize=(8, 6))

sns.boxplot(x="target", y="thalach", data=df)

plt.show()

plt.figure(figsize=(16,12))

plt.title('Correlation Heatmap of Heart Disease Dataset')

a = sns.heatmap(correlation, square=True, annot=True, fmt='.2f', linecolor='white')

a.set\_xticklabels(a.get\_xticklabels(), rotation=90)

a.set\_yticklabels(a.get\_yticklabels(), rotation=30)

plt.show()

num\_var = ['age', 'trestbps', 'chol', 'thalach', 'oldpeak', 'target' ]

sns.pairplot(df[num\_var], kind='scatter', diag\_kind='hist')

plt.show()

f, ax = plt.subplots(figsize=(10,6))

x = df['age']

ax = sns.distplot(x, bins=10)

plt.show()