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Heart Disease Prediction

An effective heart disease prediction system predicts the risk level of heart disease. The correct prediction of heart disease can prevent life threats, and incorrect prediction can prove to be fatal at the same time. The data which I have used here consists of age, sex, current smoker, heart rate, BPmeds, etc.

The data which I have used is as:

<https://www.kaggle.com/code/divyariyer/heart-disease-prediction-framingham-casestudy/data>

The code for predicting the heart disease is as:

Importing libraries

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

reading csv file

```
# Read data into DataFrame df
df = pd.read_csv('data.csv')

# Display the first few rows of the DataFrame
df.head()
```

```
# Display the last few rows of the DataFrame
df.tail()
```

```
# Display the shape of the DataFrame
df.shape
```

```
# Display the data types of the columns
df.dtypes
```

```
# Display the columns of the DataFrame
df.columns
```

```
# Display the rows of the DataFrame
df.index
```

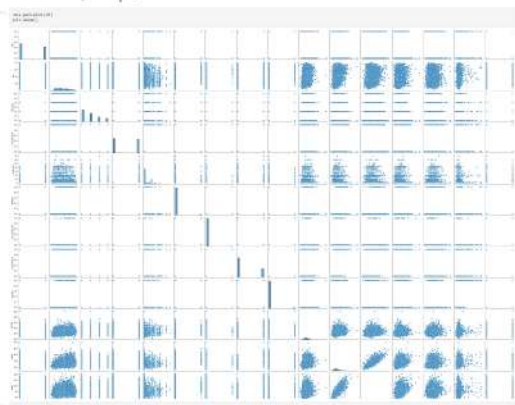
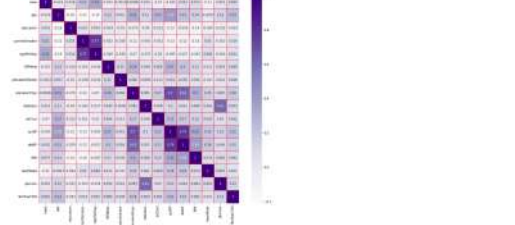
```
# Display the values of the DataFrame
df.values
```

```
# Display the mean of the DataFrame
df.mean()
```

```
# Display the standard deviation of the DataFrame
df.std()
```

```
# Display the correlation of the DataFrame
df.corr()
```

```
# Display the heatmap of the DataFrame
df.heatmap()
```



```
# Display the distribution of the variable 'category'
df['category'].value_counts()
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='bar')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='pie')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='area')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='scatter')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='box')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='violin')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='rug')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='strip')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='point')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='o')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='x')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='^')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='v')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='>')
```

```
# Display the distribution of the variable 'category'
df['category'].plot(kind='line', marker='<')
```