

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

import warnings
warnings.filterwarnings('ignore')
```

```
In [2]: aq_df=pd.read_csv('air_quality.csv')
aq_df.head()
```

Out[2]:

	stn_code	sampling_date	state	location	agency	type	so2	no2	rspm	spm
0	150.0	February - M021990	Andhra Pradesh	Hyderabad	NaN	Residential, Rural and other Areas	4.8	17.4	NaN	NaN
1	151.0	February - M021990	Andhra Pradesh	Hyderabad	NaN	Industrial Area	3.1	7.0	NaN	NaN
2	152.0	February - M021990	Andhra Pradesh	Hyderabad	NaN	Residential, Rural and other Areas	6.2	28.5	NaN	NaN
3	150.0	March - M031990	Andhra Pradesh	Hyderabad	NaN	Residential, Rural and other Areas	6.3	14.7	NaN	NaN
4	151.0	March - M031990	Andhra Pradesh	Hyderabad	NaN	Industrial Area	4.7	7.5	NaN	NaN

```
In [3]: ff_df=pd.read_csv('forestfires.csv')
ff_df.head()
```

Out[3]:

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	area
0	7	5	mar	fri	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
1	7	4	oct	tue	90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.0
2	7	4	oct	sat	90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.0
3	8	6	mar	fri	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0
4	8	6	mar	sun	89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.0

```
In [4]: ht_df=pd.read_csv('heart.csv')
ht_df.head()
```

Out[4]:

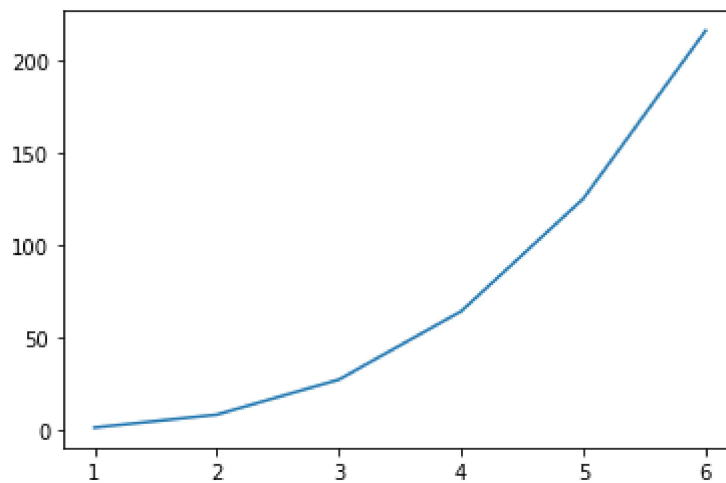
	age	sex	cp	trestbps	chol	fbs	restecg	thalach	exang	oldpeak	slope	ca	thal	targ
0	63	1	3	145	233	1	0	150	0	2.3	0	0	1	
1	37	1	2	130	250	0	1	187	0	3.5	0	0	2	
2	41	0	1	130	204	0	0	172	0	1.4	2	0	2	
3	56	1	1	120	236	0	1	178	0	0.8	2	0	2	
4	57	0	0	120	354	0	1	163	1	0.6	2	0	2	



Line Chart

```
In [5]: x = [1,2,3,4,5,6]
y = [1,8,27,64,125,216]

plt.plot(x,y)
plt.show()
```

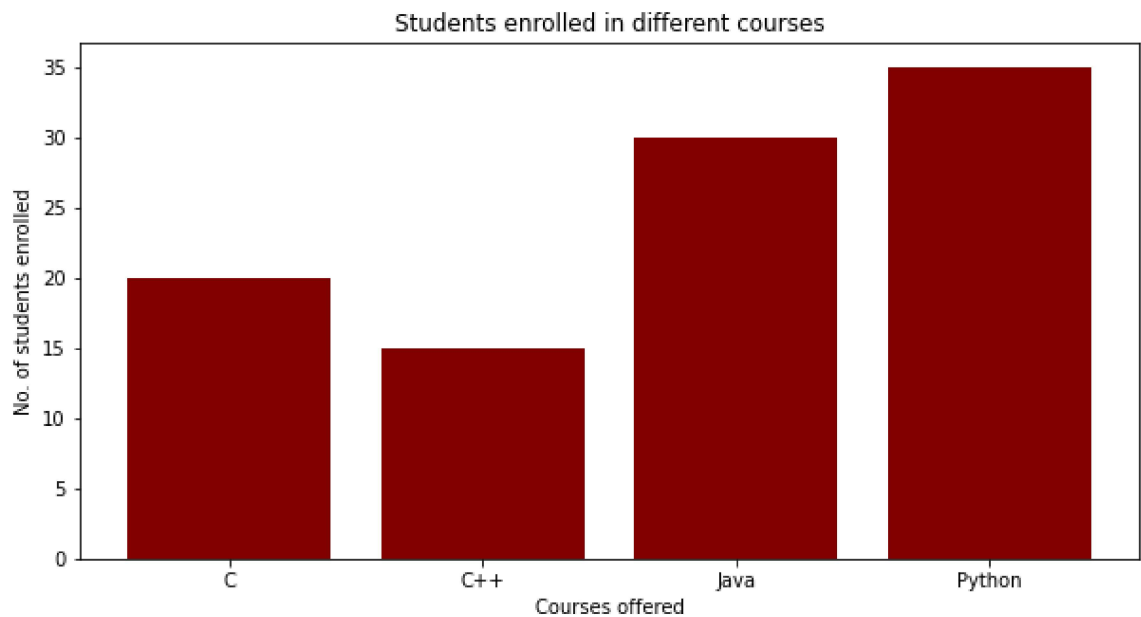


Barplot

```
In [6]: data = {'C':20, 'C++':15, 'Java':30, 'Python':35}
courses = list(data.keys())
values = list(data.values())

fig = plt.figure(figsize = (10, 5))
plt.bar(courses, values, color = 'maroon')

plt.xlabel("Courses offered")
plt.ylabel("No. of students enrolled")
plt.title("Students enrolled in different courses")
plt.show()
```



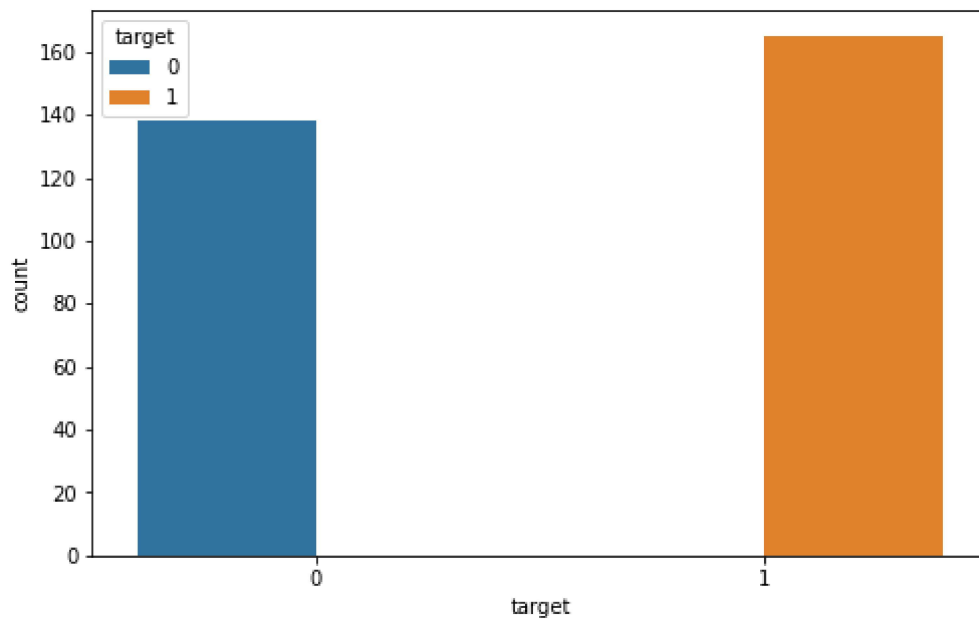
Countplot

```
In [7]: ht_df['target'].value_counts()
```

```
Out[7]: 1    165
        0    138
        Name: target, dtype: int64
```

```
In [8]: plt.figure(figsize=(8,5))  
sns.countplot(data=ht_df,x=ht_df['target'],hue=ht_df['target'])
```

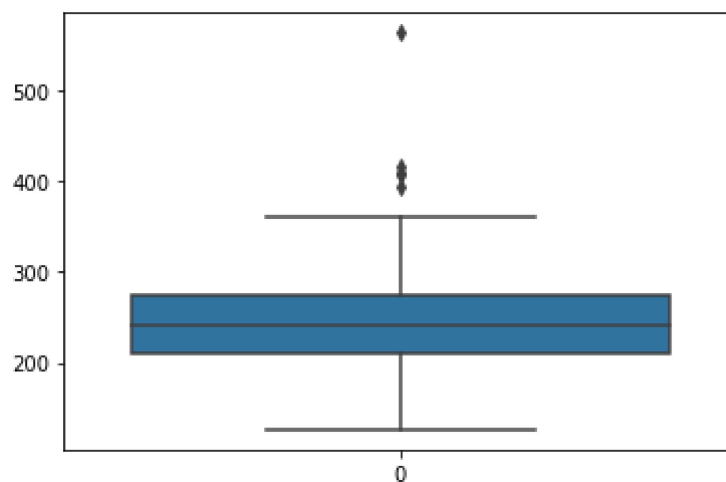
Out[8]: <AxesSubplot:xlabel='target', ylabel='count'>



Boxplot

```
In [9]: sns.boxplot(data=ht_df['chol'])
```

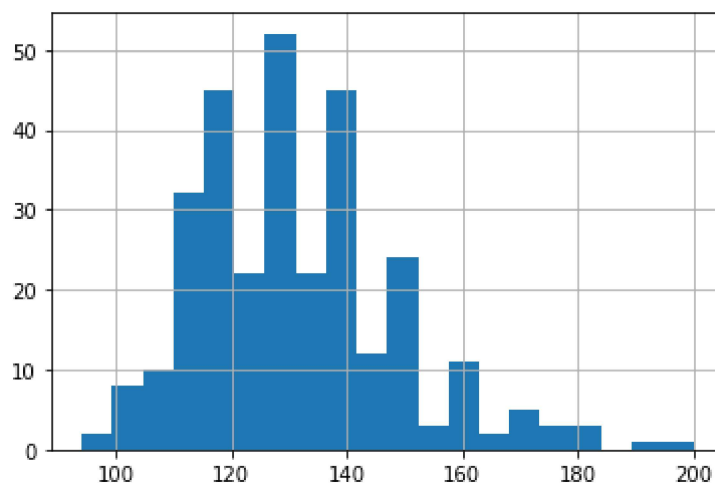
Out[9]: <AxesSubplot:>



Histogram

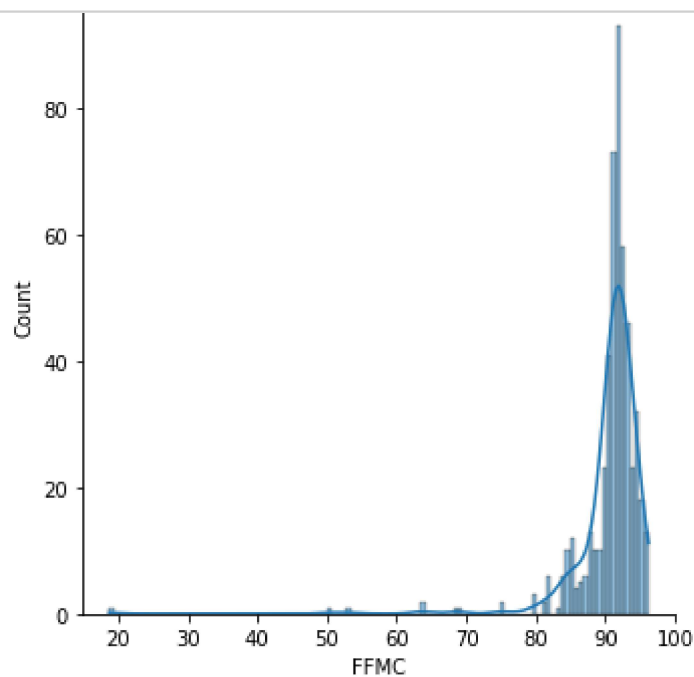
```
In [10]: ht_df['trestbps'].hist(bins = 20)
```

```
Out[10]: <AxesSubplot:>
```



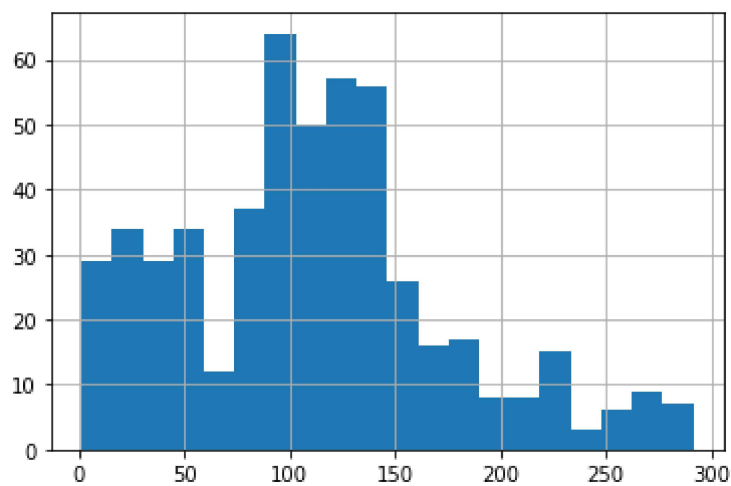
Displot

```
In [11]: sns.displot(ff_df['FFMC'],kde = True)
```



```
In [12]: ff_df['DMC'].hist(bins = 20)
```

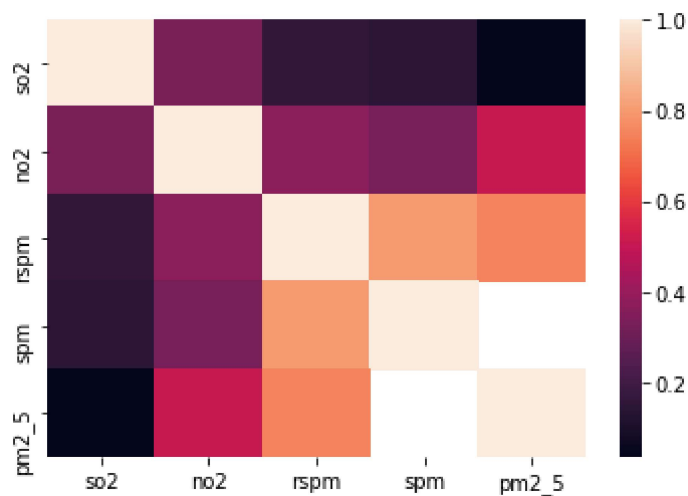
Out[12]: <AxesSubplot:>



Heatmap

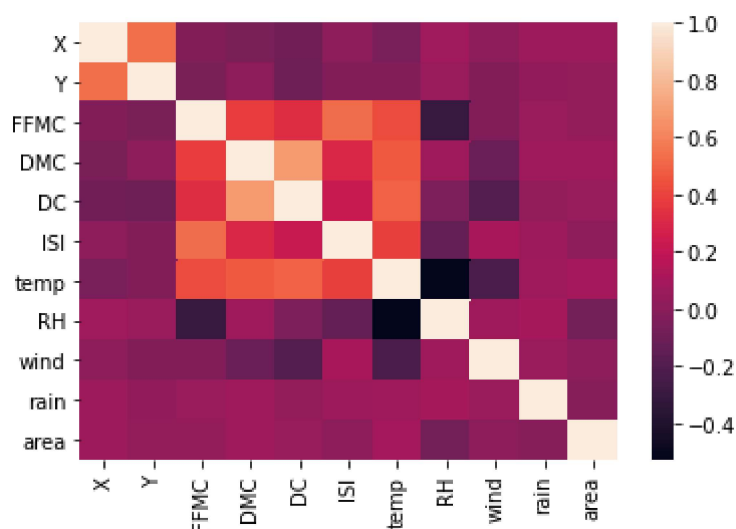
```
In [13]: sns.heatmap(aq_df.corr())
```

Out[13]: <AxesSubplot:>



```
In [14]: sns.heatmap(ff_df.corr())
```

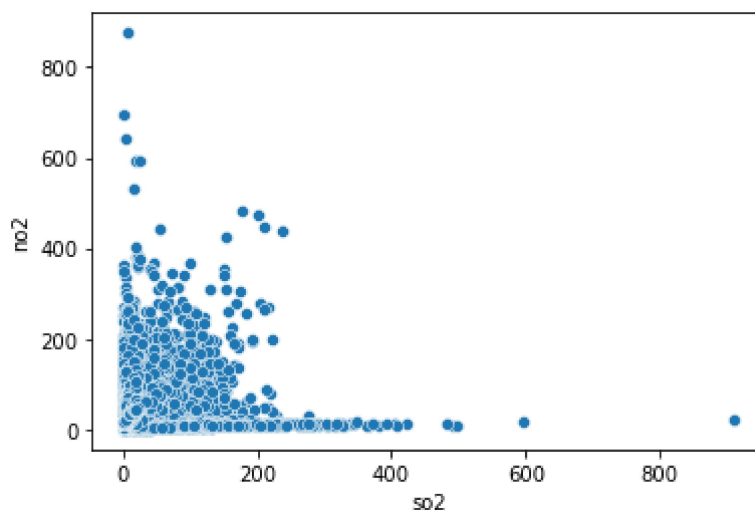
```
Out[14]: <AxesSubplot:>
```



Scatterplot

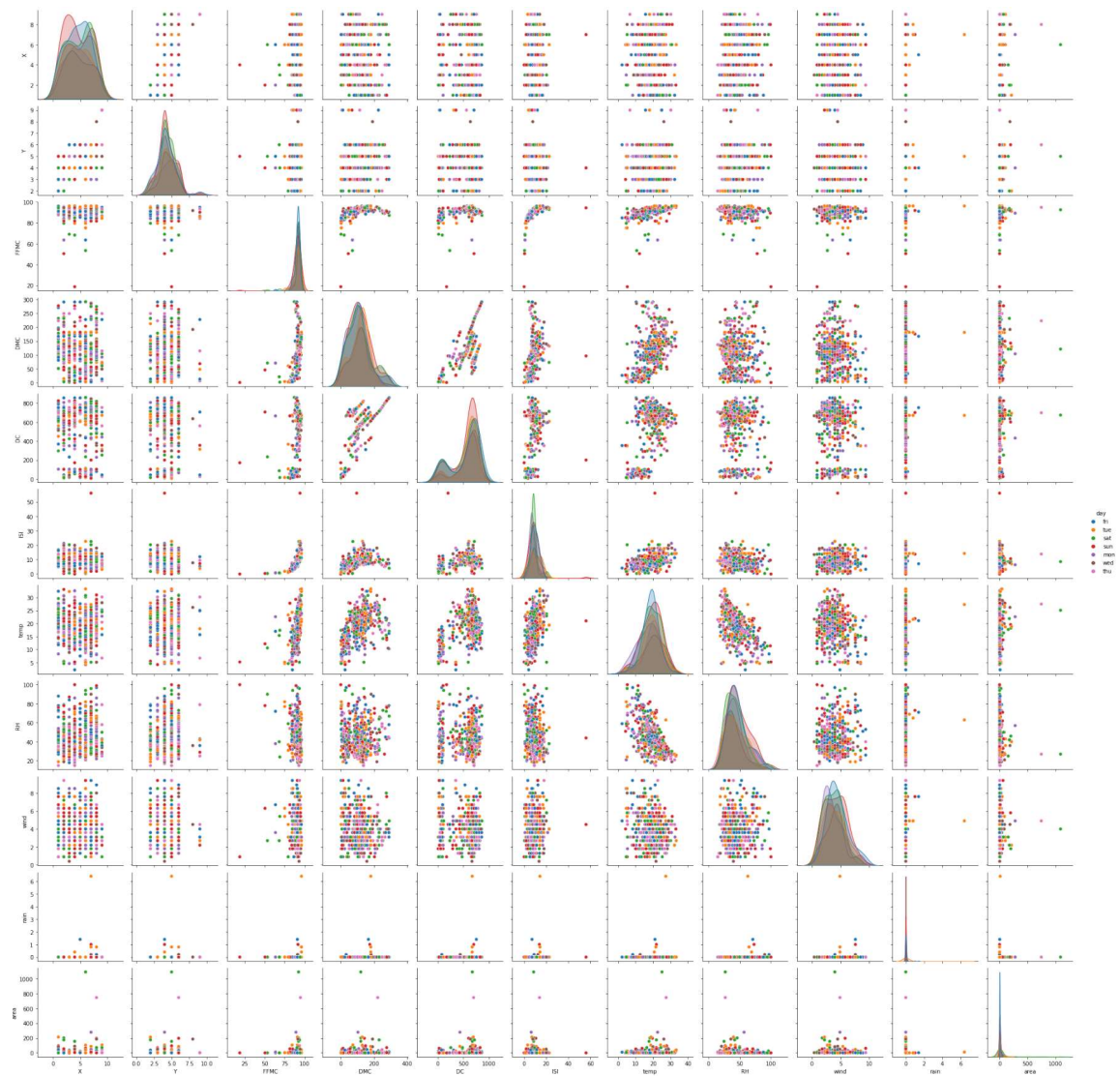
```
In [15]: sns.scatterplot(x=aq_df['so2'],y=aq_df['no2'],data=aq_df)
```

```
Out[15]: <AxesSubplot:xlabel='so2', ylabel='no2'>
```



Pairplot

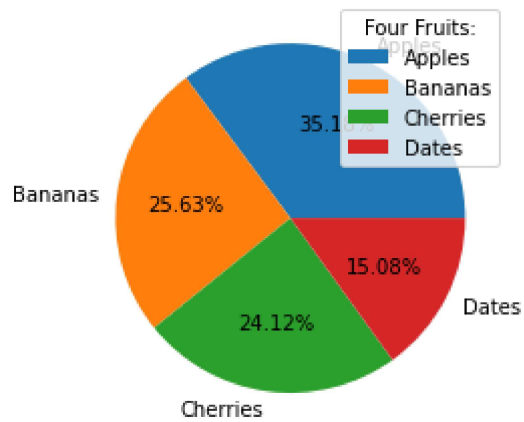
```
In [16]: sns.pairplot(ff_df,hue='day')
plt.show()
```



Piechart


```
In [17]: y = np.array([350, 255, 240, 150])
mylabels = ["Apples", "Bananas", "Cherries", "Dates"]

plt.pie(y, labels = mylabels, autopct='%1.2f%%')
plt.legend(title = "Four Fruits:")
plt.show()
```



In []: