

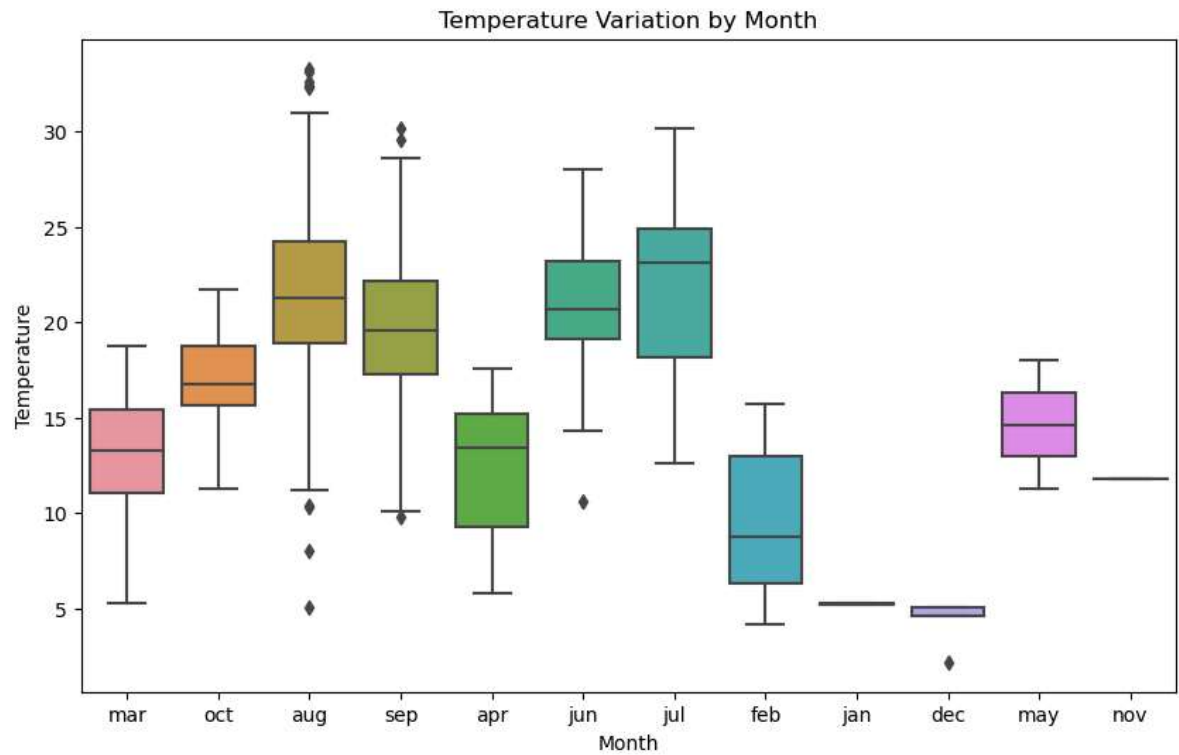
```
In [3]: import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import seaborn as sns
df=pd.read_csv(r"Downloads\forestfires - forestfires.csv" )
df
```

Out[3]:

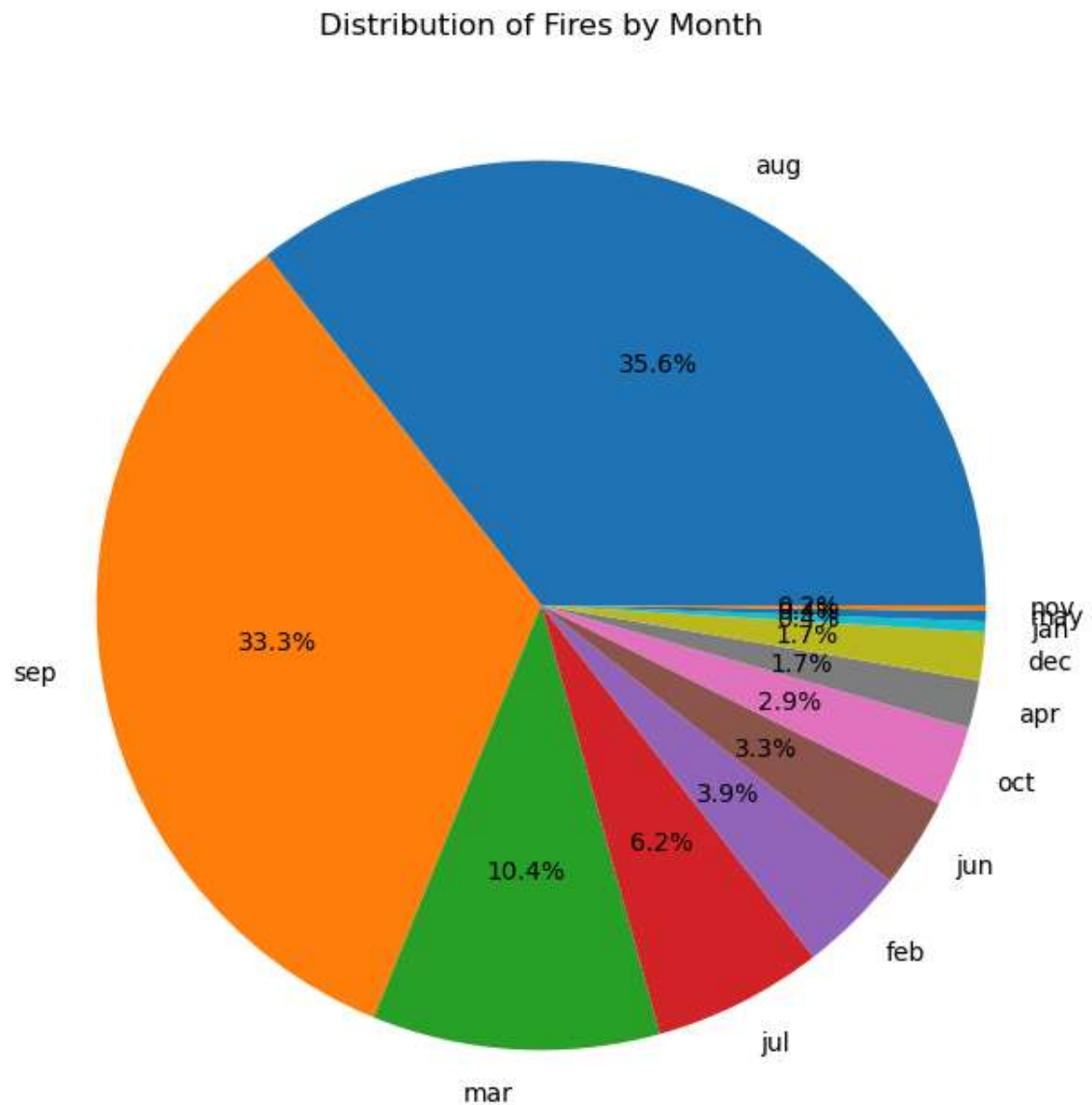
	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	area
0	7	5	mar	fri	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.00
1	7	4	oct	tue	90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.00
2	7	4	oct	sat	90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.00
3	8	6	mar	fri	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.00
4	8	6	mar	sun	89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.00
...
512	4	3	aug	sun	81.6	56.7	665.6	1.9	27.8	32	2.7	0.0	6.44
513	2	4	aug	sun	81.6	56.7	665.6	1.9	21.9	71	5.8	0.0	54.29
514	7	4	aug	sun	81.6	56.7	665.6	1.9	21.2	70	6.7	0.0	11.16
515	1	4	aug	sat	94.4	146.0	614.7	11.3	25.6	42	4.0	0.0	0.00
516	6	3	nov	tue	79.5	3.0	106.7	1.1	11.8	31	4.5	0.0	0.00

517 rows × 13 columns

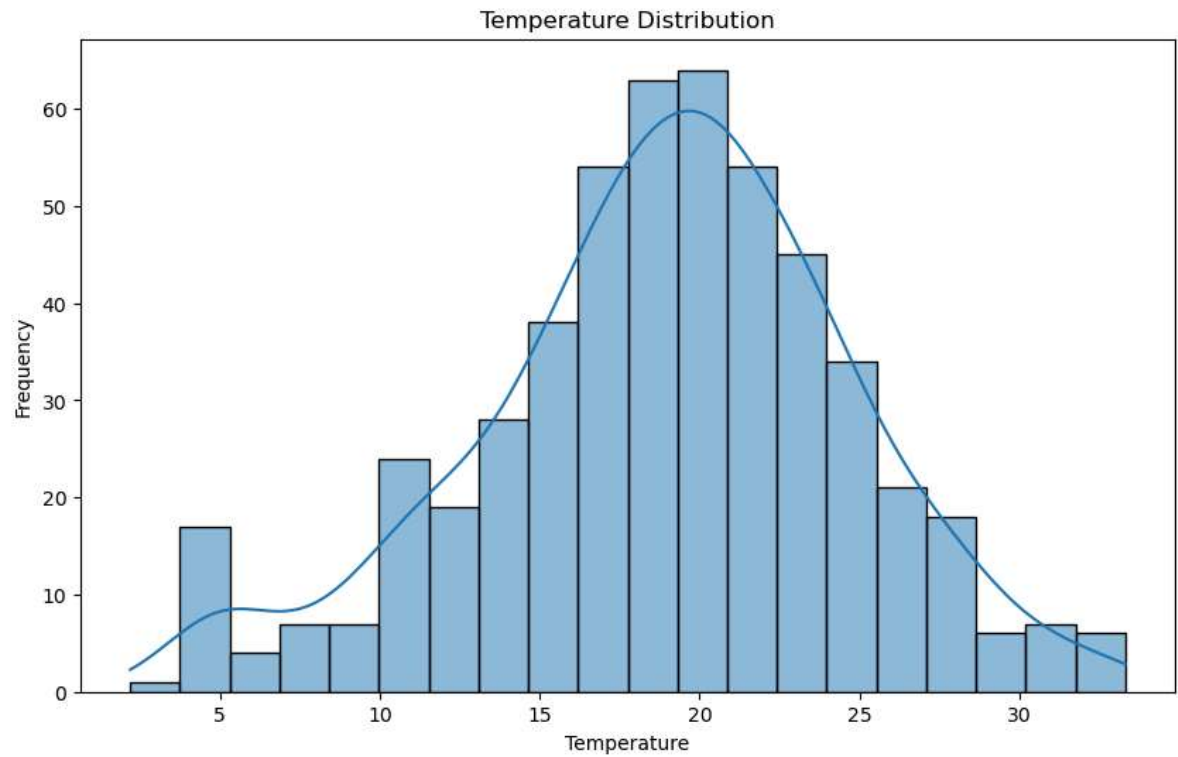
```
In [4]: plt.figure(figsize=(10,6))
sns.boxplot(x='month', y='temp', data=df)
plt.title('Temperature Variation by Month')
plt.xlabel('Month')
plt.ylabel('Temperature')
plt.show()
```



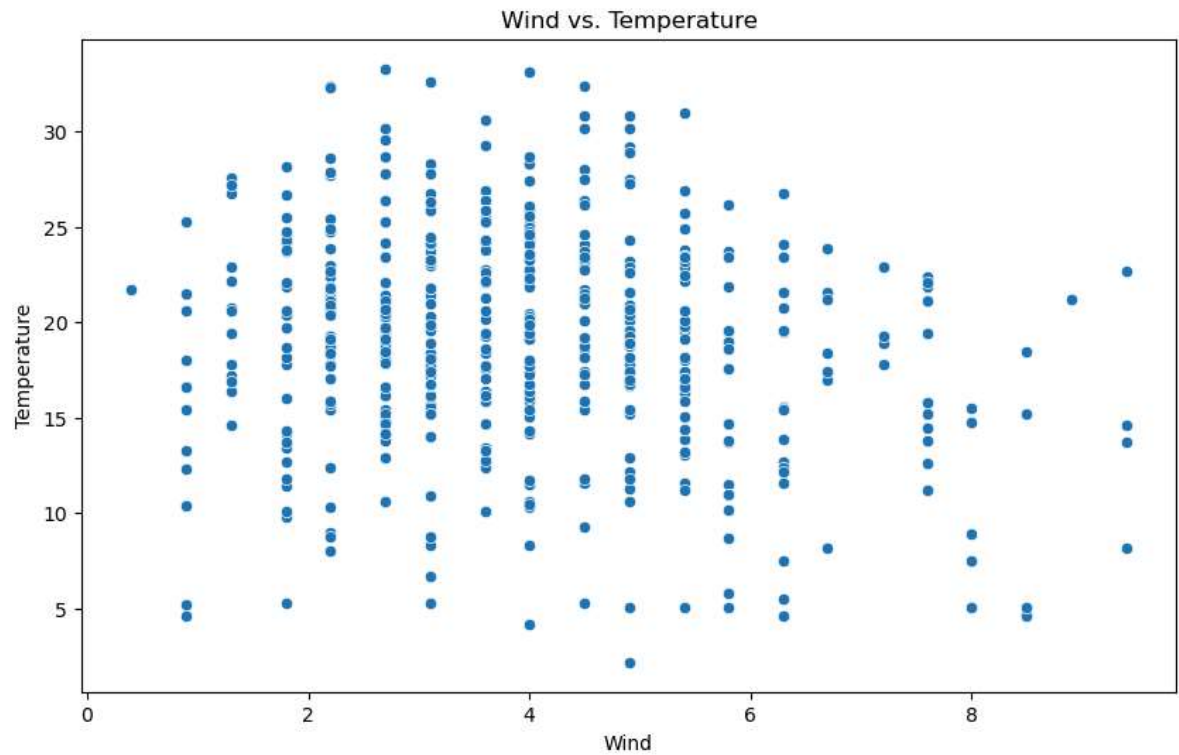
```
In [5]: plt.figure(figsize=(8,8))
df['month'].value_counts().plot(kind='pie', autopct='%1.1f%%')
plt.title('Distribution of Fires by Month')
plt.ylabel('')
plt.show()
```



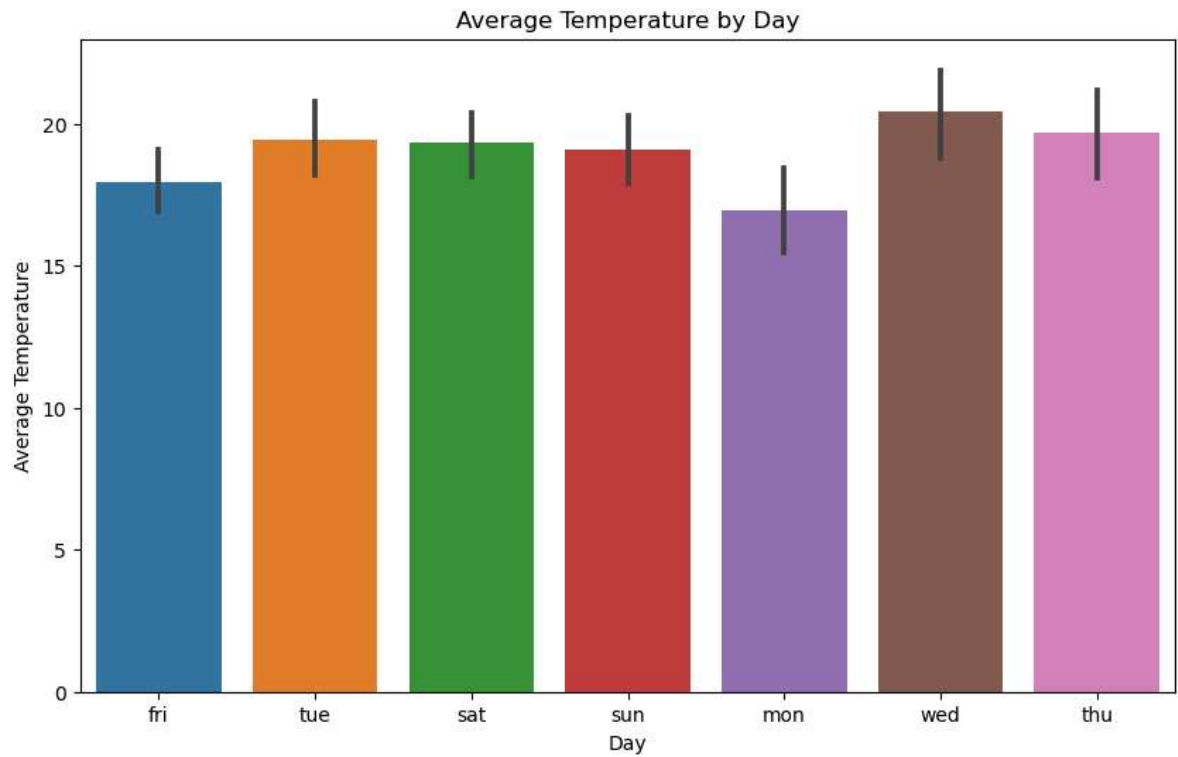
```
In [6]: plt.figure(figsize=(10,6))
sns.histplot(data=df, x='temp', bins=20, kde=True)
plt.title('Temperature Distribution')
plt.xlabel('Temperature')
plt.ylabel('Frequency')
plt.show()
```



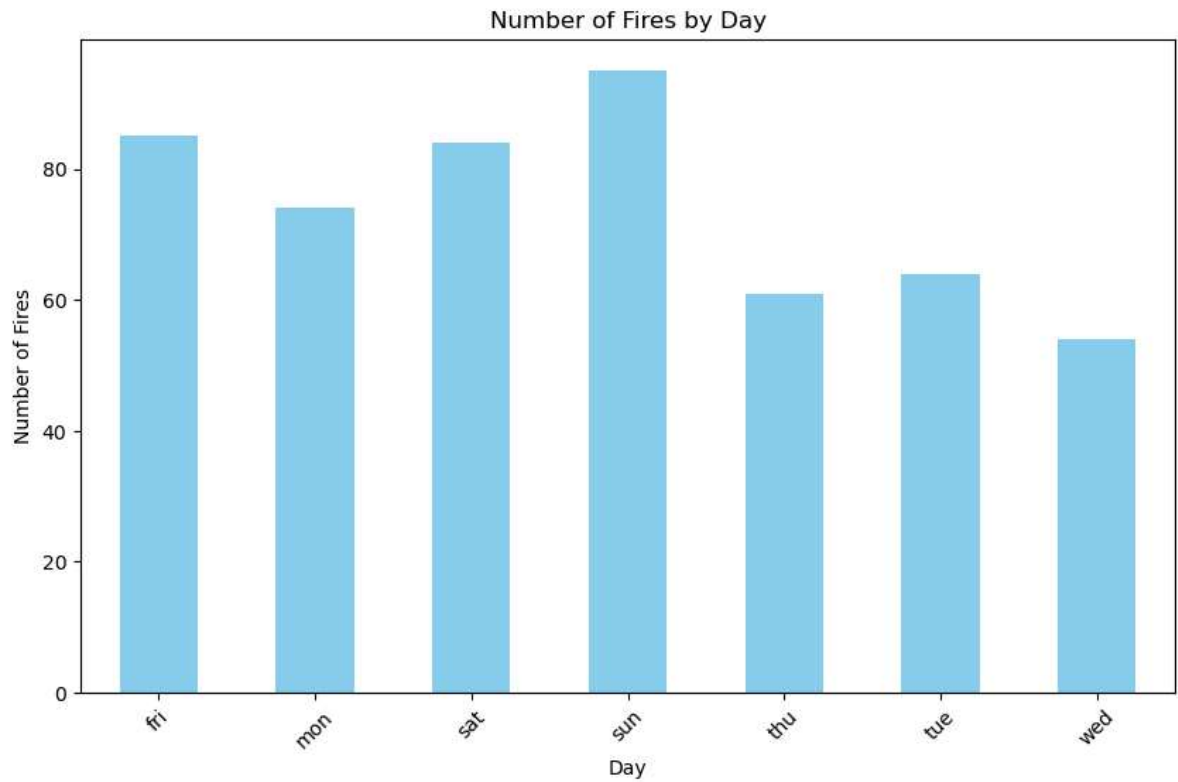
```
In [7]: plt.figure(figsize=(10,6))
sns.scatterplot(x='wind', y='temp', data=df)
plt.title('Wind vs. Temperature')
plt.xlabel('Wind')
plt.ylabel('Temperature')
plt.show()
```



```
In [11]: plt.figure(figsize=(10,6))
sns.barplot(x='day', y='temp' ,data=df)
plt.title('Average Temperature by Day')
plt.xlabel('Day')
plt.ylabel('Average Temperature')
plt.show()
```



```
In [12]: plt.figure(figsize=(10,6))
df['day'].value_counts().sort_index().plot(kind='bar', color='skyblue')
plt.title('Number of Fires by Day')
plt.xlabel('Day')
plt.ylabel('Number of Fires')
plt.xticks(rotation=45) # Rotate x-axis labels for better readability
plt.show()
```



```
In [ ]:
```