

4. Use any standard data set and perform the following

a. Find the data distributions using box and scatter plot. b. Find the outliers using plot. c. Plot the histogram, bar chart and pie chart on sample data.

Double-click (or enter) to edit

#a. Find the data distributions using box

```
import pandas as pd
import numpy as np
df = pd.read_csv("tem.csv")
df
```

	city	temperature
0	Mumbai	34
1	Chennai	38
2	Hyderabad	43
3	Banagalore	30
4	Pune	1
5	Kochi	33
6	Goa	50

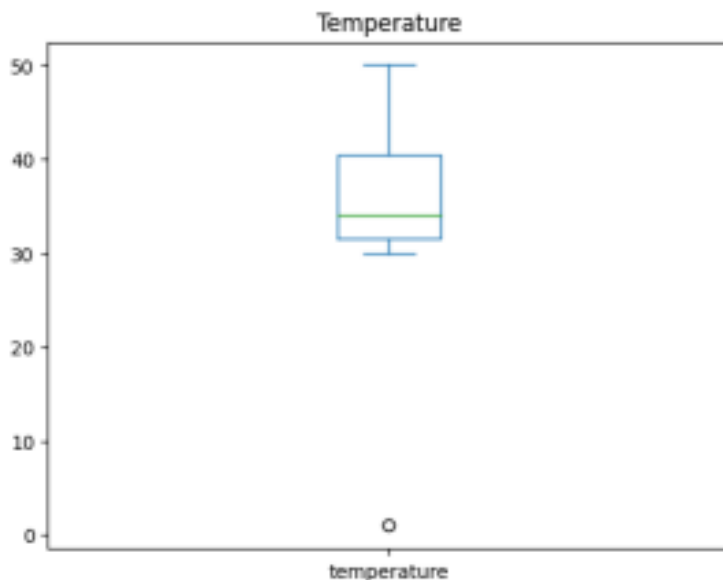
```
df.median()
```

```
<ipython-input-16-6d467abf240d>:1: FutureWarning: The default value of numeric_only in DataFrame.median is deprecated. In a future versi
df.median()
temperature    34.0
dtype: float64
```

```
from scipy import stats
import numpy as np
```

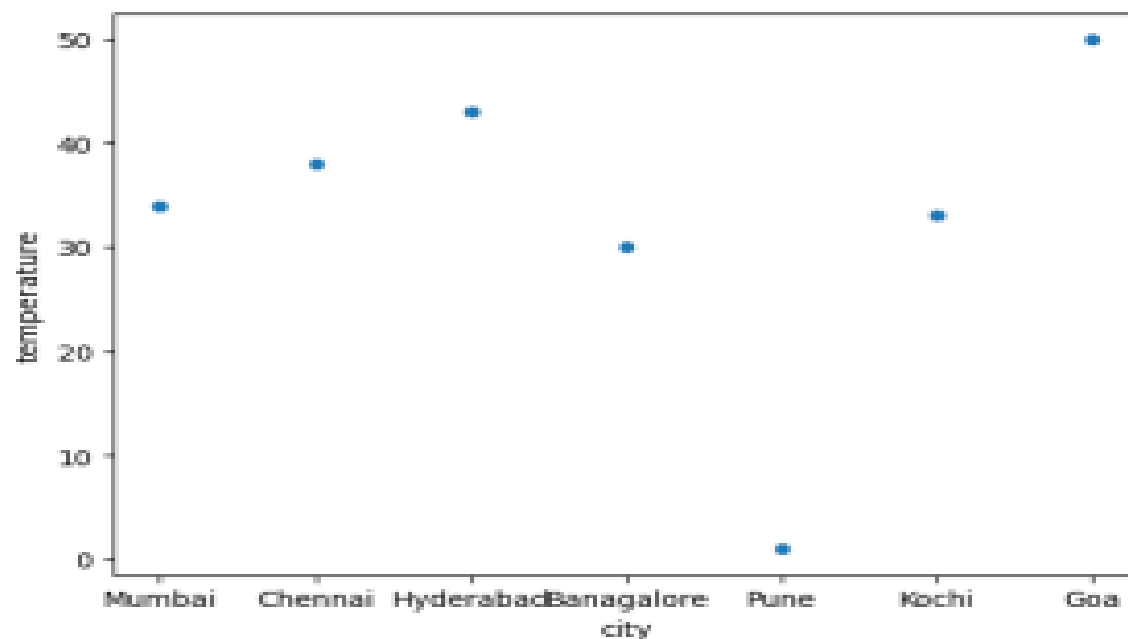
```
df['temperature'].plot(kind='box', title='Temperature')
```

```
<Axes: title={'center': 'Temperature'}>
```



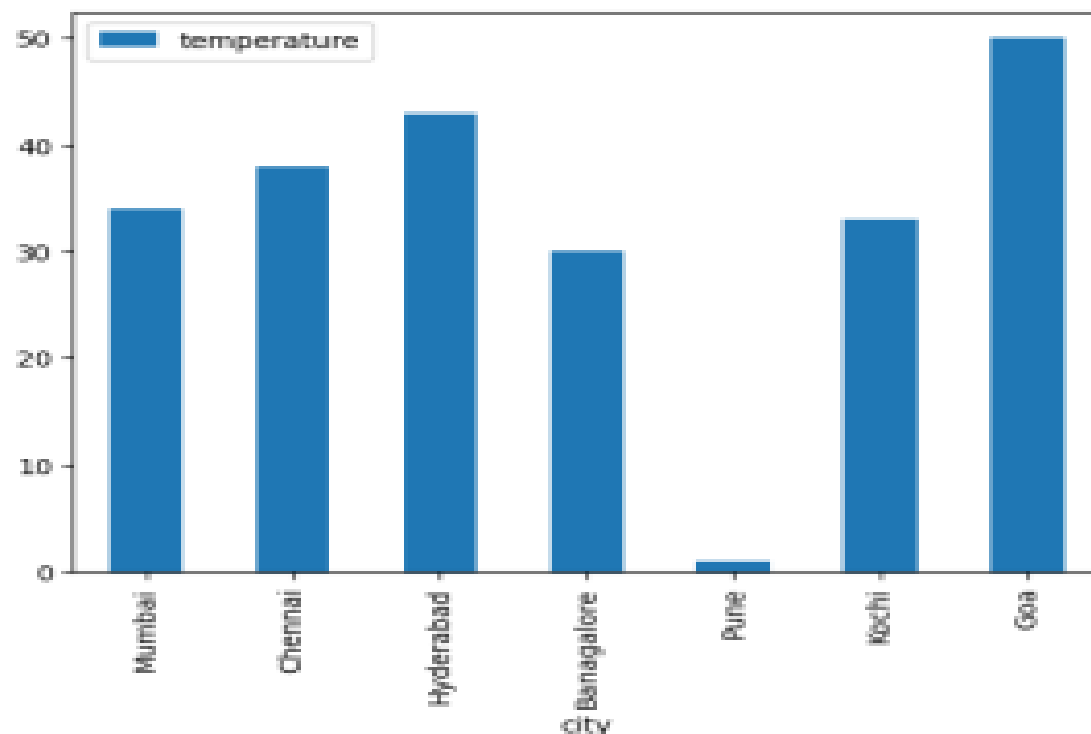
▼ b.Find the data distributions using scatter plot

```
df.plot.scatter(x = 'city', y = 'temperature');
```



```
import matplotlib.pyplot as plt  
df.plot(x="city", y="temperature", kind="bar")
```

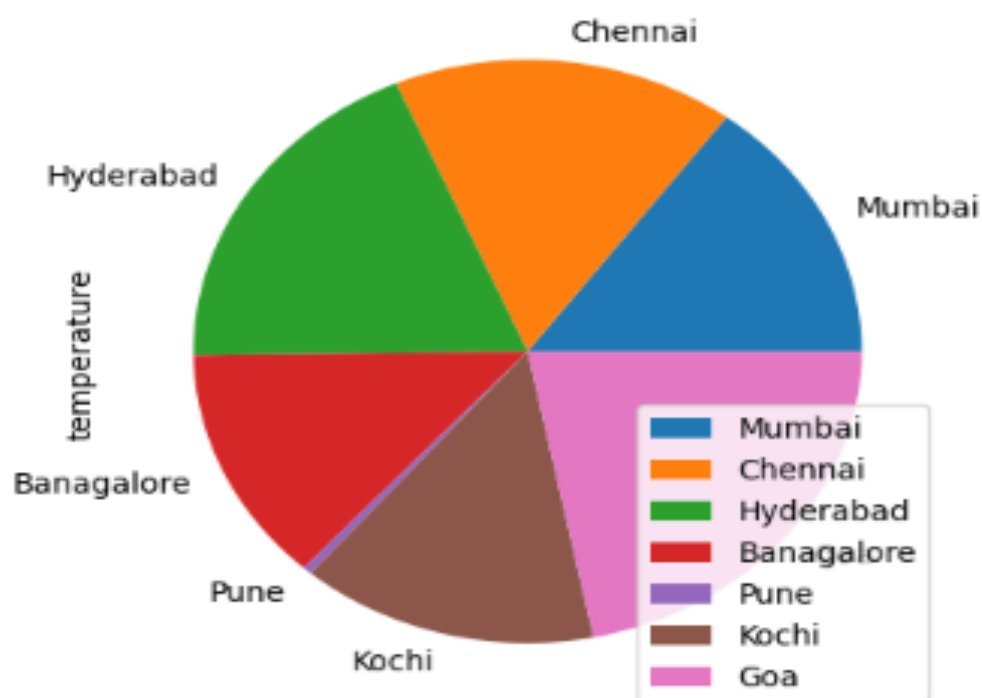
<Axes: xlabel='city'>



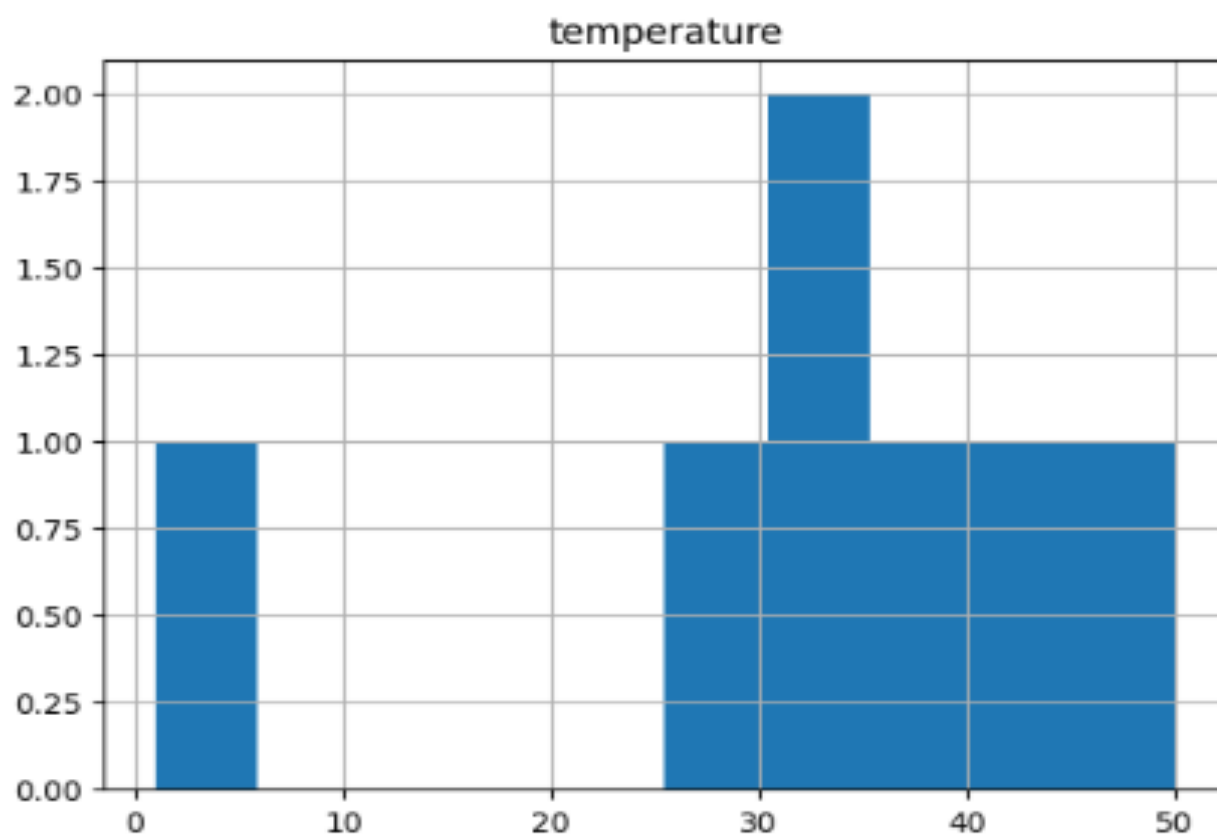
```
df.plot(kind='pie',x=' city',labels=df['city'], y=' temperature')
```

```
df.plot(kind='pie',x='city',labels=df['city'], y='temperature')
```

```
<Axes: ylabel='temperature'>
```



```
[ ] df.hist()  
plt.show()
```



```
df.hist(column='temperature', color='purple')
```

```
array([[<Axes: title={'center': 'temperature'}>]], dtype=object)
```

