

```
In [7]: #import required modules
```

```
In [18]: import pandas as pd  
import numpy as np  
import matplotlib.pyplot as plt  
import seaborn as sns
```

```
In [13]: #assign axis value
```

```
In [20]: data=pd.read_csv("C:\\Users\\intec\\OneDrive\\Desktop\\weatherAUS.csv")
```

1.Data.corr

data.corr()

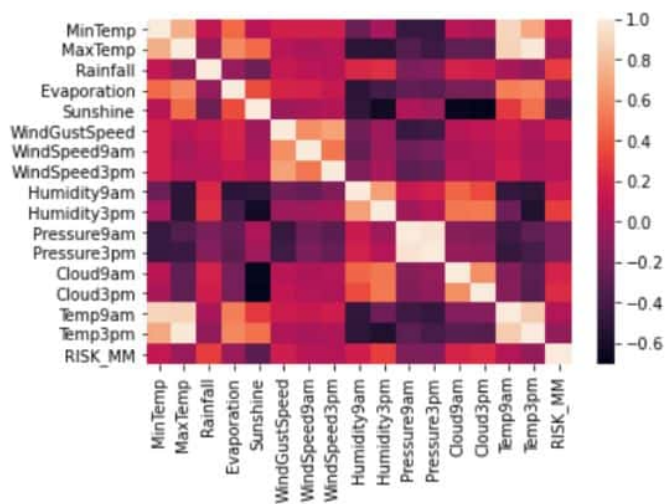
	MinTemp	MaxTemp	Rainfall	Evaporation	Sunshine	WindGustSpeed	WindSpeed9am	WindSpeed3pm	Humidity9am	Humidity3pm	Pressure
MinTemp	1.000000	0.736267	0.104255	0.467261	0.072961	0.177285	0.176005	0.175749	-0.234211	0.005999	-0.45
MaxTemp	0.736267	1.000000	-0.074839	0.588915	0.469967	0.067690	0.014680	0.050800	-0.505432	-0.509270	-0.33
Rainfall	0.104255	-0.074839	1.000000	-0.064549	-0.227525	0.133497	0.086816	0.057759	0.223725	0.255312	-0.16
Evaporation	0.467261	0.588915	-0.064549	1.000000	0.366607	0.203001	0.193936	0.128895	-0.505890	-0.392785	-0.26
Sunshine	0.072961	0.469967	-0.227525	0.366607	1.000000	-0.032831	0.008040	0.056012	-0.491603	-0.629122	0.04
WindGustSpeed	0.177285	0.067690	0.133497	0.203001	-0.032831	1.000000	0.604837	0.686419	-0.215461	-0.026663	-0.45
WindSpeed9am	0.176005	0.014680	0.086816	0.193936	0.008040	0.604837	1.000000	0.519971	-0.270807	-0.031607	-0.22
WindSpeed3pm	0.175749	0.050800	0.057759	0.128895	0.056012	0.686419	0.519971	1.000000	-0.145942	0.015903	-0.29
Humidity9am	-0.234211	-0.505432	0.223725	-0.505890	-0.491603	-0.215461	-0.270807	-0.145942	1.000000	0.667388	0.13
Humidity3pm	0.005999	-0.509270	0.255312	-0.392785	-0.629122	-0.026663	-0.031607	0.015903	0.667388	1.000000	-0.02
Pressure9am	-0.451260	-0.332293	-0.168085	-0.269907	0.040959	-0.457891	-0.227923	-0.295567	0.139519	-0.027449	1.00
Pressure3pm	-0.461623	-0.427279	-0.126728	-0.293160	-0.020464	-0.412922	-0.174916	-0.254988	0.186955	0.051840	0.96

2.Heat map

```
22]: cor=data.corr()
```

```
23]: sns.heatmap(data=cor,xticklabels=cor.columns.values,yticklabels=cor.columns.values)
```

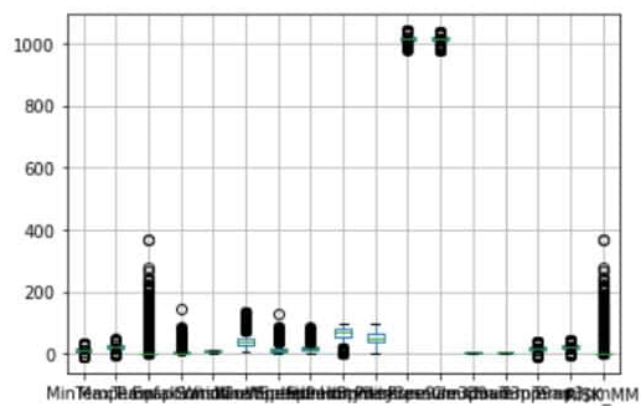
```
23]: <AxesSubplot:>
```



3.Box plot

In [25]: data.boxplot()

Out[25]: <AxesSubplot:>



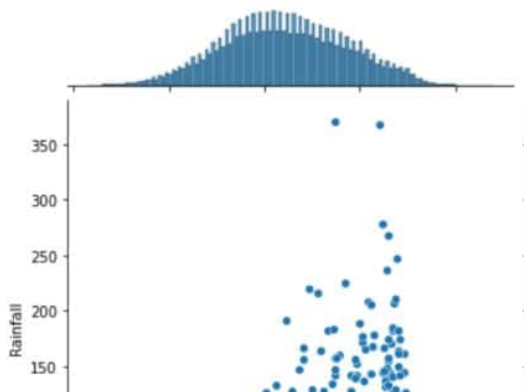
4. Joint plot

```
In [35]: sns.jointplot(data["MinTemp"],data['Rainfall'])
```

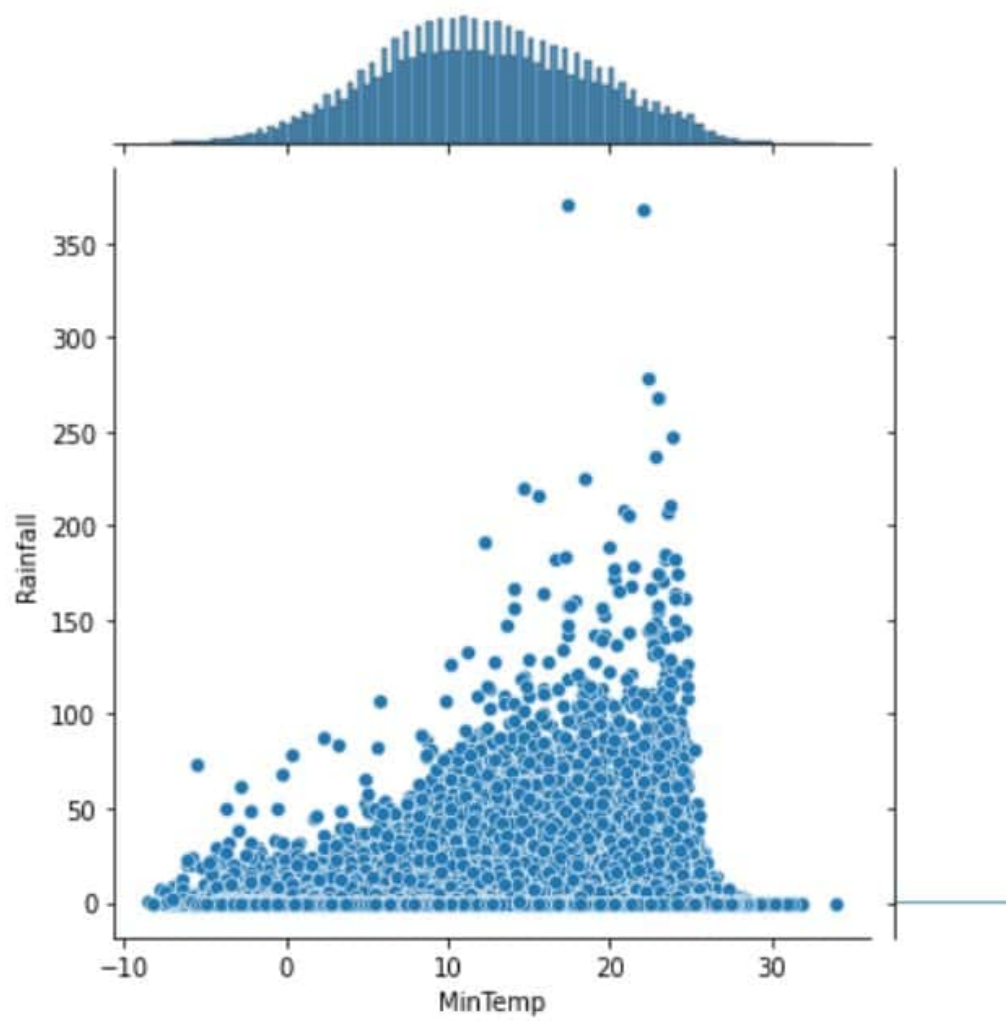
C:\Users\intec\anaconda3\lib\site-packages\seaborn_decorators.py:36: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

```
warnings.warn(
```

```
Out[35]: <seaborn.axisgrid.JointGrid at 0x1fabacc62e0>
```



Out[35]: <seaborn.axisgrid.JointGrid at 0x1fabacc62e0>



Joint plot with hue function

```
In [4]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [6]: data=pd.read_csv("C:\\Users\\intec\\OneDrive\\Desktop\\weatherAUS.csv")
```

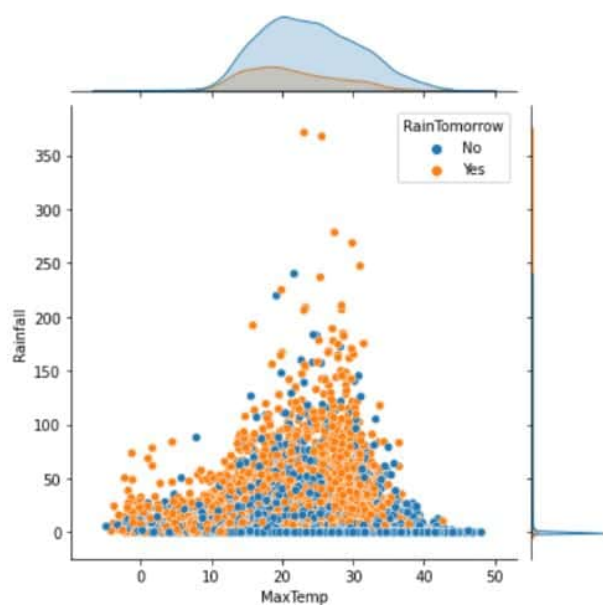
```
In [7]: sns.jointplot(data['MaxTemp'],data['Rainfall'],hue=data['RainTomorrow'])
```

C:\Users\intec\anaconda3\lib\site-packages\seaborn_decorators.py:36: FutureWarning: Pass the following variables as keyword arguments: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

```
warnings.warn(
```

```
Out[7]: <seaborn.axisgrid.JointGrid at 0x1c2ad81aa60>
```

Out[7]: <seaborn.axisgrid.JointGrid at 0x1c2ad81aa60>

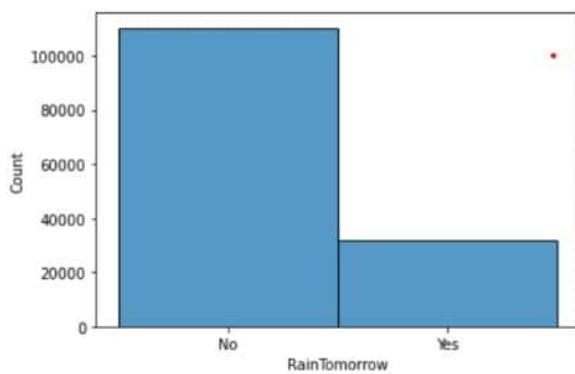


MaxTemp

5.Hist plot

```
In [8]: sns.histplot(data['RainTomorrow'])
```

```
Out[8]: <AxesSubplot:xlabel='RainTomorrow', ylabel='Count'>
```



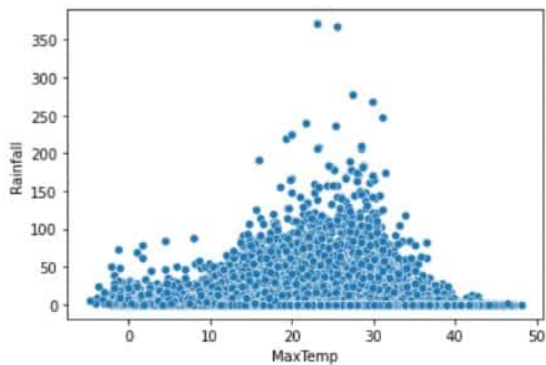
6.Scatter plot

```
In [9]: sns.scatterplot(data['MaxTemp'],data['Rainfall'])
```

C:\Users\intec\anaconda3\lib\site-packages\seaborn_decorators.py:36: FutureWarning: Pass the following variables as keyword arguments: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.

```
warnings.warn(
```

```
Out[9]: <AxesSubplot:xlabel='MaxTemp', ylabel='Rainfall'>
```



MaxTemp

7. Distplot or distribution plot

```
In [10]: sns.distplot(data['MinTemp'])
```

C:\Users\intec\anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: 'distplot' is a deprecated function and will be removed in a future version. Please adapt your code to use either 'displot' (a figure-level function with similar flexibility) or 'histplot' (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

```
Out[10]: <AxesSubplot:xlabel='MinTemp', ylabel='Density'>
```

