## The output of the code is:

```
date month year MinTemp MaxTemp Rainfall Evaporation Sunshine \
       1 2023
                8.0
                     24.3
                            0.0
                                    3.4
                                          6.3
   1
       1 2023
                14.0
1
   2
                      26.9
                             3.6
                                     4.4
                                           9.7
2
   3
       1 2023
                13.7
                      23.4
                             3.6
                                    5.8
                                           3.3
                             39.8
                                     7.2
3
       1 2023
                13.3
                      15.5
                                           9.1
   4
   5
       1 2023
                7.6
                            2.8
                                    5.6
                                         10.6
                     16.1
WindGustDir WindGustSpeed ... Humidity3pm Pressure9am Pressure3pm \
0
     NW
              30.0 ...
                        29
                             1019.7
                                       1015.0
                        36
1
     ENE
              39.0 ...
                             1012.4
                                       1008.4
2
     NW
              85.0 ...
                             1009.5
                                       1007.2
                        69
3
     NW
              54.0 ...
                        56
                             1005.5
                                       1007.0
4
     SSE
             50.0 ...
                        49
                             1018.3
                                       1018.5
 Cloud9am Cloud3pm Temp9am Temp3pm RainToday RISK_MM RainTomorrow
0
     7
          7
             14.4
                    23.6
                            No
                                 3.6
                                         Yes
1
     5
          3
             17.5
                    25.7
                           Yes
                                 3.6
                                         Yes
2
     8
          7
             15.4
                    20.2
                           Yes
                                 39.8
                                         Yes
3
     2
          7
             13.5
                    14.1
                           Yes
                                 2.8
                                         Yes
          7
             11.1
                    15.4
                           Yes
                                 0.0
                                         No
[5 rows x 25 columns]
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 366 entries, 0 to 365
Data columns (total 25 columns):
# Column
              Non-Null Count Dtype
0 date
            366 non-null int64
1 month
             366 non-null int64
2 year
            366 non-null int64
3 MinTemp
               366 non-null float64
4 MaxTemp
               366 non-null float64
             366 non-null float64
5 Rainfall
6 Evaporation 366 non-null float64
             363 non-null float64
7 Sunshine
8 WindGustDir 363 non-null object
9 WindGustSpeed 364 non-null float64
10 WindDir9am 335 non-null object
11 WindDir3pm 365 non-null object
12 WindSpeed9am 359 non-null float64
13 WindSpeed3pm 366 non-null int64
14 Humidity9am 366 non-null int64
15 Humidity3pm 366 non-null int64
16 Pressure9am 366 non-null float64
17 Pressure3pm 366 non-null float64
18 Cloud9am
               366 non-null int64
19 Cloud3pm
                366 non-null int64
20 Temp9am
                366 non-null float64
                366 non-null float64
21 Temp3pm
22 RainToday
                366 non-null object
23 RISK MM
               366 non-null float64
24 RainTomorrow 366 non-null object
dtypes: float64(12), int64(8), object(5)
memory usage: 71.6+ KB
None
             month year MinTemp MaxTemp Rainfall \
count 366.000000 366.000000 366.000000 366.000000 366.000000
```

```
      mean
      15.756831
      6.519126
      2023.0
      7.265574
      20.550273
      1.428415

      std
      8.823592
      3.460686
      0.0
      6.025800
      6.690516
      4.225800

      min
      1.000000
      1.000000
      2023.0
      -5.300000
      7.600000
      0.000000

      25%
      8.000000
      4.000000
      2023.0
      2.300000
      15.025000
      0.000000

      50%
      16.000000
      7.000000
      2023.0
      7.450000
      19.650000
      0.200000

      75%
      23.000000
      9.750000
      2023.0
      12.500000
      25.500000
      0.200000

      max
      31.000000
      12.000000
      2023.0
      20.900000
      35.800000
      39.800000
```

Evaporation Sunshine WindGustSpeed WindSpeed9am WindSpeed3pm \ count 366.000000 363.000000 364.000000 359.000000 366.000000 4.521858 7.909366 9.651811 17.986339 39.840659 mean 2.669383 3.481517 7.951929 8.856997 std 13.059807  $0.200000 \quad 0.000000$ 13.000000 0.000000 0.000000 min 25% 2.200000 5.950000 31.000000 6.000000 11.000000 50% 4.200000 8.600000 39.000000 7.000000 17.000000 75% 6.400000 10.500000 46.000000 13.000000 24.000000 13.800000 13.600000 98.000000 41.000000 52.000000 max

Humidity9am Humidity3pm Pressure9am Pressure3pm Cloud9am \
count 366.000000 366.000000 366.000000 366.000000 mean 72.035519 44.519126 1019.709016 1016.810383 3.890710 std 13.137058 16.850947 6.686212 6.469422 2.956131 min 36.000000 13.000000 996.500000 996.800000 0.0000000 25% 64.000000 32.250000 1015.350000 1012.800000 1.000000 50% 72.000000 43.000000 1020.150000 1017.400000 3.500000 75% 81.000000 55.000000 1024.475000 1021.475000 7.000000 max 99.000000 96.000000 1035.700000 1033.200000 8.000000

Cloud3pm Temp9am Temp3pm RISK\_MM
count 366.000000 366.000000 366.000000
mean 4.024590 12.358470 19.230874 1.428415
std 2.666268 5.630832 6.640346 4.225800
min 0.000000 0.100000 5.100000 0.000000
25% 1.000000 7.625000 14.150000 0.000000
50% 4.000000 12.550000 18.550000 0.000000
75% 7.000000 17.000000 24.000000 0.2000000
max 8.000000 24.700000 34.500000 39.800000

C:\Users\M.Geethasree\anaconda3\Lib\site-packages\seaborn\\_oldcore.py:1119: FutureWarning: use\_i nf\_as\_na option is deprecated and will be removed in a future version. Convert inf values to NaN before op erating instead.

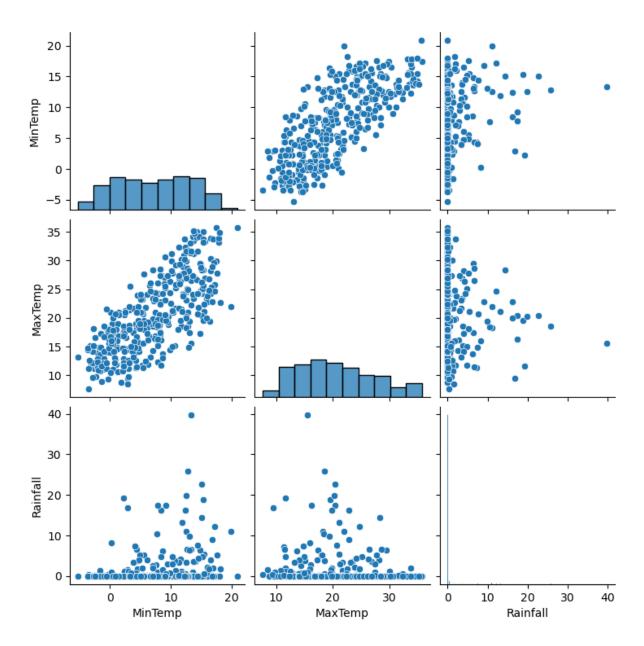
with pd.option\_context('mode.use\_inf\_as\_na', True):

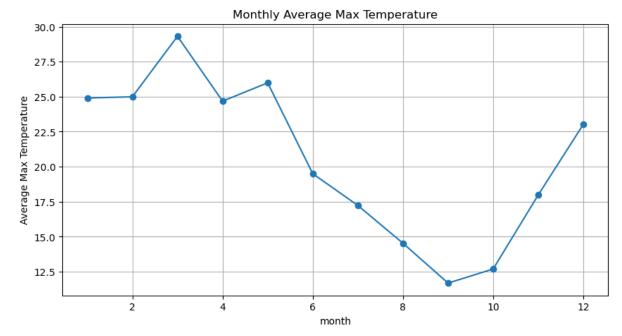
C:\Users\M.Geethasree\anaconda3\Lib\site-packages\seaborn\\_oldcore.py:1119: FutureWarning: use\_i nf\_as\_na option is deprecated and will be removed in a future version. Convert inf values to NaN before op erating instead.

with pd.option\_context('mode.use\_inf\_as\_na', True):

C:\Users\M.Geethasree\anaconda3\Lib\site-packages\seaborn\\_oldcore.py:1119: FutureWarning: use\_i nf\_as\_na option is deprecated and will be removed in a future version. Convert inf values to NaN before op erating instead.

with pd.option\_context('mode.use\_inf\_as\_na', True):





Mean Squared Error for Rainfall Prediction: 37.0768456005826 Highest rainfall month: 3, Lowest rainfall month: 9

[]: