```
import pandas as pd
data = pd.read_csv("Malaysia weather dataset.csv")
```

```
data
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	severerisk	sunrise	sunset	moonphase	conditions	descripti
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	80.2	...	18.3	8	30	2023-07-01T07:08:02	2023-07-01T19:26:04	0.42	Rain, Partially cloudy	Partly clou through the day w rain cl
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	75.1	...	19.6	7	30	2023-07-02T07:08:15	2023-07-02T19:26:14	0.46	Partially cloudy	Partly clou through the d
2	Malaysia	2023-07-03	32.6	27.6	29.8	40.7	31.7	35.5	24.8	75.4	...	14.8	7	60	2023-07-03T07:08:27	2023-07-03T19:26:24	0.50	Partially cloudy	Partly clou through the d
3	Malaysia	2023-07-04	33.7	25.8	28.6	41.1	25.8	32.7	24.8	81.1	...	18.8	8	60	2023-07-04T07:08:40	2023-07-04T19:26:34	0.52	Partially cloudy	Partly clou through the d
4	Malaysia	2023-07-05	32.7	23.5	26.9	39.3	23.5	29.3	24.1	86.0	...	21.5	8	60	2023-07-05T07:08:52	2023-07-05T19:26:43	0.56	Rain, Partially cloudy	Partly clou through the day w ra
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
349	Malaysia	2024-06-14	31.7	27.1	28.8	38.8	30.8	34.6	25.7	83.6	...	16.2	8	60	2024-06-14T07:04:34	2024-06-14T19:22:41	0.25	Rain, Partially cloudy	Partly clou through the day w a chanc
350	Malaysia	2024-06-15	33.0	25.1	28.6	40.3	25.1	32.4	25.0	82.0	...	18.5	8	30	2024-06-15T07:04:46	2024-06-15T19:22:55	0.28	Rain, Partially cloudy	Partly clou through the day w a chanc
351	Malaysia	2024-06-16	30.0	26.1	27.4	35.1	26.1	30.9	25.0	86.9	...	8.2	6	30	2024-06-16T07:04:58	2024-06-16T19:23:08	0.31	Rain, Partially cloudy	Partly clou through the day w a chanc
352	Malaysia	2024-06-17	32.4	25.0	26.5	38.4	25.0	27.9	23.9	86.6	...	13.6	7	30	2024-06-17T07:05:11	2024-06-17T19:23:22	0.34	Rain, Partially cloudy	Partly clou through the day w a chanc
353	Malaysia	2024-06-18	32.7	23.9	26.8	37.9	23.9	28.3	22.7	79.3	...	24.2	9	30	2024-06-18T07:05:23	2024-06-18T19:23:35	0.37	Rain, Partially cloudy	Partly clou through the day w storms

354 rows × 33 columns

```
data.head(2)
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	80.2	...	18.3	8	
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	75.1	...	19.6	7	

2 rows × 33 columns

INFO

```
data .info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 354 entries, 0 to 353
Data columns (total 33 columns):
 #   Column            Non-Null Count  Dtype  
---  ------            --------------  -----  
 0   name              354 non-null    object 
 1   datetime          354 non-null    object 
 2   tempmax           354 non-null    float64
 3   tempmin           354 non-null    float64
 4   temp              354 non-null    float64
 5   feelslikemax      354 non-null    float64
 6   feelslikemin      354 non-null    float64
 7   feelslike         354 non-null    float64
 8   dew               354 non-null    float64
 9   humidity          354 non-null    float64
 10  precip            354 non-null    float64
 11  precipprob        354 non-null    int64  
 12  precipcover       354 non-null    float64
 13  preciptype        341 non-null    object 
 14  snow              354 non-null    int64  
 15  snowdepth         354 non-null    int64  
 16  windgust          354 non-null    float64
 17  windspeed         354 non-null    float64
 18  winddir           354 non-null    float64
 19  sealevelpressure  354 non-null    float64
 20  cloudcover        354 non-null    float64
 21  visibility        354 non-null    float64
 22  solarradiation    354 non-null    float64
 23  solarenergy       354 non-null    float64
 24  uvindex           354 non-null    int64  
 25  severerisk        354 non-null    int64  
 26  sunrise           354 non-null    object 
 27  sunset            354 non-null    object 
 28  moonphase         354 non-null    float64
 29  conditions        354 non-null    object 
 30  description       354 non-null    object 
 31  icon              354 non-null    object 
 32  stations          354 non-null    object 
```

```
dtypes: float64(19), int64(5), object(9)
memory usage: 91.4+ KB
```

DESCRIBE

```
data.describe()
```

	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	precip	precipprob	.
count	354.000000	354.000000	354.00000	354.000000	354.000000	354.000000	354.000000	354.000000	354.000000	354.000000	
mean	33.011017	25.444068	28.35000	39.649153	25.806215	31.772316	24.322034	80.105932	7.032638	70.338983	
std	1.416902	0.877113	1.00405	2.225760	1.744198	2.092391	0.740125	5.430884	12.479956	45.740967	
min	27.100000	21.400000	25.70000	30.900000	21.400000	26.600000	21.600000	61.100000	0.000000	0.000000	
25%	32.100000	24.900000	27.60000	38.225000	24.900000	30.300000	23.900000	76.800000	0.000000	0.000000	
50%	33.000000	25.300000	28.30000	39.400000	25.300000	31.700000	24.400000	80.950000	0.884000	100.000000	
75%	33.900000	26.000000	29.10000	41.100000	26.000000	33.200000	24.800000	84.375000	8.452750	100.000000	
max	36.000000	27.900000	30.70000	45.800000	32.400000	36.800000	25.900000	92.000000	83.840000	100.000000	

8 rows × 24 columns

DTYPE

```
data.dtypes
```

```
name                object
datetime            object
tempmax            float64
tempmin            float64
temp               float64
feelslikemax       float64
feelslikemin       float64
feelslike          float64
dew                float64
humidity           float64
precip             float64
precipprob           int64
precipcover        float64
preciptype          object
snow                 int64
snowdepth            int64
windgust           float64
windspeed          float64
winddir            float64
sealevelpressure   float64
cloudcover         float64
visibility         float64
solarradiation     float64
solarenergy        float64
```

```
uvindex              int64
severerisk           int64
sunrise             object
sunset              object
moonphase          float64
conditions          object
description         object
icon                object
stations            object
dtype: object
```

NULL VALUES

```
data.isnull()
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
0	False	False	False	False	False	False	False	False	False	False	...	False	False	
1	False	False	False	False	False	False	False	False	False	False	...	False	False	
2	False	False	False	False	False	False	False	False	False	False	...	False	False	
3	False	False	False	False	False	False	False	False	False	False	...	False	False	
4	False	False	False	False	False	False	False	False	False	False	...	False	False	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
349	False	False	False	False	False	False	False	False	False	False	...	False	False	
350	False	False	False	False	False	False	False	False	False	False	...	False	False	
351	False	False	False	False	False	False	False	False	False	False	...	False	False	
352	False	False	False	False	False	False	False	False	False	False	...	False	False	
353	False	False	False	False	False	False	False	False	False	False	...	False	False	

354 rows × 33 columns

SUM OF NULL VALUES

```
data.isnull().sum()
```

```
name               0
datetime           0
tempmax            0
tempmin            0
temp               0
feelslikemax       0
feelslikemin       0
feelslike          0
dew                0
humidity           0
precip             0
```

```
precipprob          0
precipcover         0
preciptype         13
snow                0
snowdepth           0
windgust            0
windspeed           0
winddir             0
sealevelpressure    0
cloudcover          0
visibility          0
solarradiation      0
solarenergy         0
uvindex             0
severerisk          0
sunrise             0
sunset              0
moonphase           0
conditions          0
description         0
icon                0
stations            0
dtype: int64
```

NOT NULL VALUES

```
data.notnull()
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	se
0	True	True	True	True	True	True	True	True	True	True	...	True	True	
1	True	True	True	True	True	True	True	True	True	True	...	True	True	
2	True	True	True	True	True	True	True	True	True	True	...	True	True	
3	True	True	True	True	True	True	True	True	True	True	...	True	True	
4	True	True	True	True	True	True	True	True	True	True	...	True	True	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
349	True	True	True	True	True	True	True	True	True	True	...	True	True	
350	True	True	True	True	True	True	True	True	True	True	...	True	True	
351	True	True	True	True	True	True	True	True	True	True	...	True	True	
352	True	True	True	True	True	True	True	True	True	True	...	True	True	
353	True	True	True	True	True	True	True	True	True	True	...	True	True	

354 rows × 33 columns

SUM OF NOT NULL VALUES

```
data.notnull().sum()
```

```
name                354
datetime            354
tempmax             354
tempmin             354
temp                354
feelslikemax        354
feelslikemin        354
feelslike           354
dew                 354
humidity            354
precip              354
precipprob          354
precipcover         354
preciptype          341
snow                354
snowdepth           354
windgust            354
windspeed           354
winddir             354
sealevelpressure    354
cloudcover          354
visibility          354
solarradiation      354
solarenergy         354
uvindex             354
severerisk          354
sunrise             354
sunset              354
moonphase           354
conditions          354
description         354
icon                354
stations            354
dtype: int64
```

VALUE_COUNTS

```
data.value_counts()
```

```
name      datetime    tempmax  tempmin  temp  feelslikemax  feelslikemin  feelslike  dew   humidity  precip  precipprob  precipcover  preciptype  snow  snowdepth  windgust  windspeed  winddir
sealevelpressure  cloudcover  visibility  solarradiation  solarenergy  uvindex  severerisk  sunrise              sunset               moonphase  conditions             description
icon          stations
Malaysia  2023-07-01  32.8     24.7     28.4  40.4          24.7          32.2       24.4  80.2      5.829   100         8.33         rain        0     0          11.5      18.1       278.2
1010.6            48.7        9.8         213.2           18.3         8        30          2023-07-01T07:08:02  2023-07-01T19:26:04  0.42       Rain, Partially cloudy  Partly cloudy throughout
the day with rain clearing later.               rain              48647099999,48650099999,WMSA,WMKK    1
          2024-02-24  33.9     25.9     28.3  40.9          25.9          31.9       24.7  81.9      8.841   100         4.17         rain        0     0          6.8       18.6       186.4
1011.1            51.1        9.4         296.3           25.5         10       30          2024-02-24T07:25:21  2024-02-24T19:27:51  0.50       Rain, Partially cloudy  Partly cloudy throughout
the day with late afternoon rain.               rain              48647099999,48650099999,WMSA,WMKK    1
          2024-03-03  32.2     26.0     28.6  37.3          26.0          32.3       24.4  79.3      4.530   100         4.17         rain        0     0          12.6      9.8        53.5
1010.3            53.8        9.4         244.0           21.3         9        30          2024-03-03T07:23:15  2024-03-03T19:27:03  0.75       Rain, Partially cloudy  Partly cloudy throughout
the day with morning rain.                      rain              48647099999,48650099999,WMSA,WMKK    1
          2024-03-02  33.2     25.9     28.3  39.8          25.9          32.0       24.9  82.9      36.838  100         4.17         rain        0     0          8.3       13.9       291.1
1010.4            51.6        9.5         232.2           20.0         8        30          2024-03-02T07:23:33  2024-03-02T19:27:11  0.72       Rain, Partially cloudy  Partly cloudy throughout
the day with morning rain.                      rain              48647099999,48650099999,WMSA,WMKK    1
          2024-03-01  33.8     25.9     29.1  40.1          25.9          32.1       24.1  76.7      6.235   100         4.17         rain        0     0          6.8       16.9       314.0
1009.9            51.6        9.1         221.6           19.1         8        30          2024-03-01T07:23:50  2024-03-01T19:27:18  0.69       Rain, Partially cloudy  Partly cloudy throughout
```

```
the day with late afternoon rain.              rain             48647099999,48650099999,WMSA,WMKK    1

..
          2023-10-31  33.0     25.0     27.8  41.7          25.0          30.2       24.1  81.5      23.869  100         8.33         rain        0     0          5.4       19.0       228.2
1009.6            52.4        9.6         280.1           24.0         9        60          2023-10-31T06:56:33  2023-10-31T18:57:08  0.57       Rain, Partially cloudy  Partly cloudy throughout
the day with rain.                                    rain             48647099999,48650099999,WMSA,WMKK    1
          2023-10-30  32.1     24.0     27.0  38.1          24.0          29.2       24.0  84.7      0.000   0           0.00         rain        0     0          5.4       18.8       303.5
1009.7            47.5        9.4         251.0           21.7         9        30          2023-10-30T06:56:32  2023-10-30T18:57:15  0.54       Partially cloudy        Partly cloudy throughout
the day.                                              partly-cloudy-day  48647099999,48650099999,WMSA,WMKK    1
          2023-10-29  32.9     23.6     26.5  39.1          23.6          28.0       23.7  85.9      54.812  100         8.33         rain        0     0          7.9       17.1       306.0
1010.4            50.6        8.3         279.6           24.0         10       60          2023-10-29T06:56:31  2023-10-29T18:57:24  0.50       Rain, Partially cloudy  Partly cloudy throughout
the day with rain in the morning and afternoon.  rain             48647099999,48650099999,WMSA,WMKK    1
          2023-10-28  33.2     24.9     26.8  39.4          24.9          28.4       24.2  86.5      0.464   100         4.17         rain        0     0          38.9      18.1       27.4
1010.8            54.9        7.3         230.3           19.9         9        30          2023-10-28T06:56:32  2023-10-28T18:57:33  0.48       Rain, Partially cloudy  Partly cloudy throughout
the day with afternoon rain.                          rain             48647099999,48650099999,WMSA,WMKK    1
          2024-06-18  32.7     23.9     26.8  37.9          23.9          28.3       22.7  79.3      2.200   100         37.50        rain        0     0          13.0      13.5       283.4
1009.7            43.3        14.9        280.0           24.2         9        30          2024-06-18T07:05:23  2024-06-18T19:23:35  0.37       Rain, Partially cloudy  Partly cloudy throughout
the day with storms possible.                         rain             WMSA,WMKK                            1
Length: 341, dtype: int64
```

COLUMNS

```
data.columns
```

```
Index(['name', 'datetime', 'tempmax', 'tempmin', 'temp', 'feelslikemax',
       'feelslikemin', 'feelslike', 'dew', 'humidity', 'precip', 'precipprob',
       'precipcover', 'preciptype', 'snow', 'snowdepth', 'windgust',
       'windspeed', 'winddir', 'sealevelpressure', 'cloudcover', 'visibility',
       'solarradiation', 'solarenergy', 'uvindex', 'severerisk', 'sunrise',
       'sunset', 'moonphase', 'conditions', 'description', 'icon', 'stations'],
      dtype='object')
```

SHAPES

```
data.shape
```

```
(354, 33)
```

```
data.head(2)
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	80.2	...	18.3	8	
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	75.1	...	19.6	7	

2 rows × 33 columns

FIND THE RECORD OF THE '20-07-2023' DATE

```
data[data['datetime'] == '2023-07-20']
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
19	Malaysia	2023-07-20	29.7	23.0	26.4	33.9	23.0	28.2	23.3	84.0	...	8.8	7	

1 rows × 33 columns

CALCULATE THE RECORD OF 'TEMPERATURE MAXIMUM IS GREATER THAN 30' AND 'TEMPERATURE MINIMUM IS LESS THAN 25'

```
data[(data['tempmax']  > 30) & (data['tempmin'] < 25)]
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	80.2	...	18.3	8
4	Malaysia	2023-07-05	32.7	23.5	26.9	39.3	23.5	29.3	24.1	86.0	...	21.5	8
5	Malaysia	2023-07-06	32.8	24.1	26.6	40.3	24.1	28.4	23.8	85.7	...	17.5	8
6	Malaysia	2023-07-07	31.9	24.8	27.2	38.4	24.8	29.2	24.0	83.5	...	21.3	8
7	Malaysia	2023-07-08	31.8	24.9	27.7	37.9	24.9	30.5	24.2	82.1	...	19.0	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...
252	Malaysia	2024-03-09	34.9	24.0	28.2	38.8	24.0	31.0	23.9	79.8	...	25.3	10
290	Malaysia	2024-04-16	34.9	24.8	28.1	44.0	24.8	32.1	25.3	86.1	...	23.1	10
291	Malaysia	2024-04-17	32.7	24.3	28.1	40.4	24.3	31.7	25.1	84.5	...	11.2	7
308	Malaysia	2024-05-04	31.0	24.8	27.8	36.7	24.8	31.3	24.6	83.2	...	7.1	6
353	Malaysia	2024-06-18	32.7	23.9	26.8	37.9	23.9	28.3	22.7	79.3	...	24.2	9

89 rows × 33 columns

FIND THE VALUES OF FEELSLIKEMAX IS 40 OR FEELSLIKEMIN IS 24

```
data[(data['feelslikemax'] == '40.0') | (data['feelslikemin'] == '24.0')]
```

name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	severe

0 rows × 33 columns

FIND THE RECORD OF HUMIDITY IS GREATER THAN 80

```
data[data['humidity'] > 80]
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	80.2	...	18.3	8
3	Malaysia	2023-07-04	33.7	25.8	28.6	41.1	25.8	32.7	24.8	81.1	...	18.8	8
4	Malaysia	2023-07-05	32.7	23.5	26.9	39.3	23.5	29.3	24.1	86.0	...	21.5	8
5	Malaysia	2023-07-06	32.8	24.1	26.6	40.3	24.1	28.4	23.8	85.7	...	17.5	8
6	Malaysia	2023-07-07	31.9	24.8	27.2	38.4	24.8	29.2	24.0	83.5	...	21.3	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...
341	Malaysia	2024-06-06	30.4	26.1	27.6	36.7	26.1	31.2	25.0	86.1	...	17.2	9
349	Malaysia	2024-06-14	31.7	27.1	28.8	38.8	30.8	34.6	25.7	83.6	...	16.2	8
350	Malaysia	2024-06-15	33.0	25.1	28.6	40.3	25.1	32.4	25.0	82.0	...	18.5	8
351	Malaysia	2024-06-16	30.0	26.1	27.4	35.1	26.1	30.9	25.0	86.9	...	8.2	6
352	Malaysia	2024-06-17	32.4	25.0	26.5	38.4	25.0	27.9	23.9	86.6	...	13.6	7

189 rows × 33 columns

REMOVE THE RECORDS OF MOONPHASE IS GREATER THAN 0.30

```
data[~(data['moonphase'] > 0.30)]
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex
17	Malaysia	2023-07-18	31.1	24.9	28.0	36.8	24.9	31.3	24.0	79.4	...	17.9	8
18	Malaysia	2023-07-19	30.0	24.3	26.2	36.2	24.3	27.6	23.9	87.4	...	16.5	8
19	Malaysia	2023-07-20	29.7	23.0	26.4	33.9	23.0	28.2	23.3	84.0	...	8.8	7
20	Malaysia	2023-07-21	32.9	26.0	29.2	38.9	26.0	32.8	23.7	73.7	...	17.4	8
21	Malaysia	2023-07-22	30.0	24.1	27.1	36.2	24.1	29.8	24.3	84.8	...	21.7	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...
346	Malaysia	2024-06-11	33.9	26.8	29.5	42.1	29.6	34.7	24.6	76.1	...	21.9	9
347	Malaysia	2024-06-12	32.9	26.0	28.5	39.4	26.0	31.7	23.8	76.9	...	12.0	5
348	Malaysia	2024-06-13	34.7	25.8	29.7	42.9	25.8	33.8	24.2	73.5	...	20.7	8
349	Malaysia	2024-06-14	31.7	27.1	28.8	38.8	30.8	34.6	25.7	83.6	...	16.2	8
350	Malaysia	2024-06-15	33.0	25.1	28.6	40.3	25.1	32.4	25.0	82.0	...	18.5	8

113 rows × 33 columns

CALCULATE THE VALUE OF HUMIDITY CAN BE ADD BY 5

```
data['humidity'] = data['humidity'].apply(lambda x:x+5)
```

```
data.head(2)
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	85.2	...	18.3	8	
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	80.1	...	19.6	7	

2 rows × 33 columns

FIND THE RECORDS OF ICON IS RAIN OR SEVERERISK IS 30 AND HUMIDITY IS GREATER THAN 80

```
data[((data['icon'] == 'rain') | (data['severerisk'] == 30)) & (data['humidity'] >80)]
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	85.2	...	18.3	8
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	80.1	...	19.6	7
4	Malaysia	2023-07-05	32.7	23.5	26.9	39.3	23.5	29.3	24.1	91.0	...	21.5	8
5	Malaysia	2023-07-06	32.8	24.1	26.6	40.3	24.1	28.4	23.8	90.7	...	17.5	8
6	Malaysia	2023-07-07	31.9	24.8	27.2	38.4	24.8	29.2	24.0	88.5	...	21.3	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...
349	Malaysia	2024-06-14	31.7	27.1	28.8	38.8	30.8	34.6	25.7	88.6	...	16.2	8
350	Malaysia	2024-06-15	33.0	25.1	28.6	40.3	25.1	32.4	25.0	87.0	...	18.5	8
351	Malaysia	2024-06-16	30.0	26.1	27.4	35.1	26.1	30.9	25.0	91.9	...	8.2	6
352	Malaysia	2024-06-17	32.4	25.0	26.5	38.4	25.0	27.9	23.9	91.6	...	13.6	7
353	Malaysia	2024-06-18	32.7	23.9	26.8	37.9	23.9	28.3	22.7	84.3	...	24.2	9

264 rows × 33 columns

FIND THE RECORD OF SOLARENERGY IS LESS THAN 20

```
data[(data['solarenergy'] < 20)]
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	85.2	...	18.3	8
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	80.1	...	19.6	7
2	Malaysia	2023-07-03	32.6	27.6	29.8	40.7	31.7	35.5	24.8	80.4	...	14.8	7
3	Malaysia	2023-07-04	33.7	25.8	28.6	41.1	25.8	32.7	24.8	86.1	...	18.8	8
5	Malaysia	2023-07-06	32.8	24.1	26.6	40.3	24.1	28.4	23.8	90.7	...	17.5	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...
347	Malaysia	2024-06-12	32.9	26.0	28.5	39.4	26.0	31.7	23.8	81.9	...	12.0	5
349	Malaysia	2024-06-14	31.7	27.1	28.8	38.8	30.8	34.6	25.7	88.6	...	16.2	8
350	Malaysia	2024-06-15	33.0	25.1	28.6	40.3	25.1	32.4	25.0	87.0	...	18.5	8
351	Malaysia	2024-06-16	30.0	26.1	27.4	35.1	26.1	30.9	25.0	91.9	...	8.2	6
352	Malaysia	2024-06-17	32.4	25.0	26.5	38.4	25.0	27.9	23.9	91.6	...	13.6	7

137 rows × 33 columns

FIND THE STANDARD DEVIATION OF SEALEVELPRESSURE

```
data.sealevelpressure.std()
```

```
1.3740451055134235
```

FIND THE STANDARD DEVIATION OF SOLARRADIATION

```
data.solarradiation.std()
```

```
59.625371873986815
```

```
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

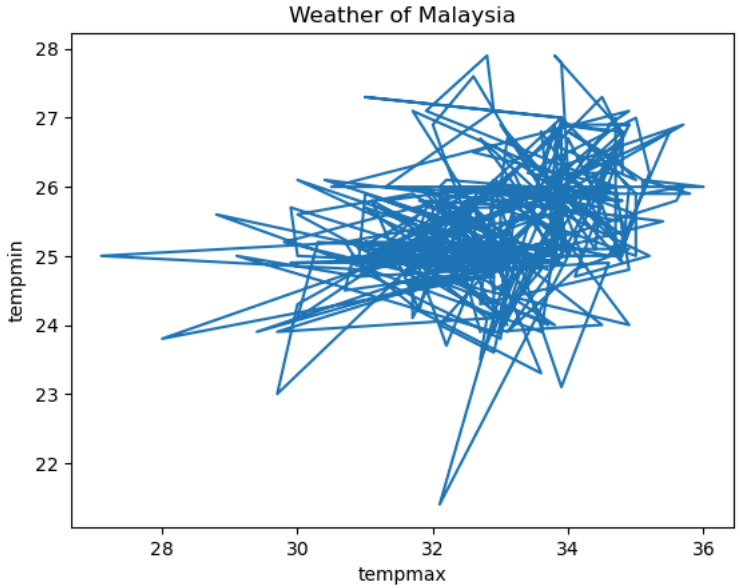
```
data.head(2)
```

	name	datetime	tempmax	tempmin	temp	feelslikemax	feelslikemin	feelslike	dew	humidity	...	solarenergy	uvindex	s
0	Malaysia	2023-07-01	32.8	24.7	28.4	40.4	24.7	32.2	24.4	85.2	...	18.3	8	
1	Malaysia	2023-07-02	32.0	26.9	29.4	37.9	30.4	34.1	24.3	80.1	...	19.6	7	

2 rows × 33 columns

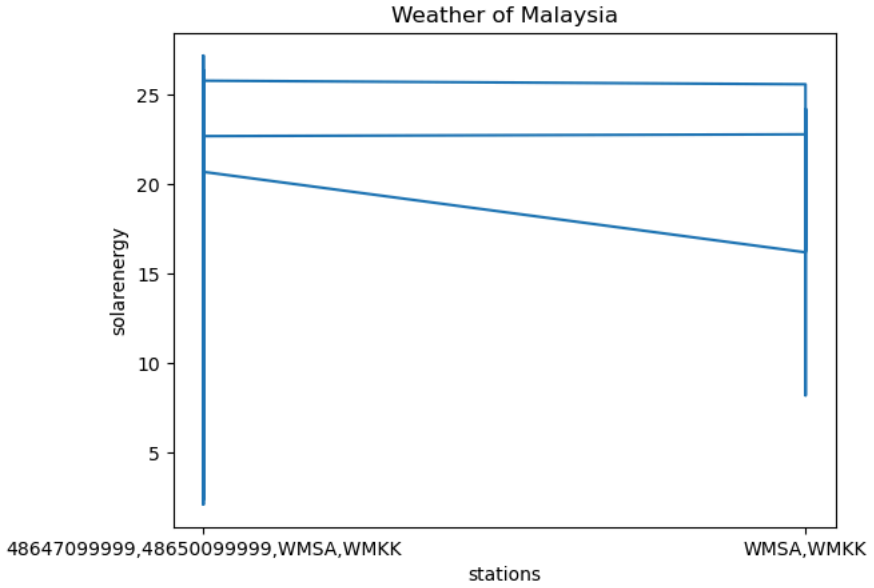
PLOT THE VALUES ARE TEMPMAX AND TEMPMIN IN WEATHER DATASET

```
plt.plot(data['tempmax'], data['tempmin'])
plt.xlabel('tempmax')
plt.ylabel('tempmin')
plt.title('Weather of Malaysia')
plt.show()
```



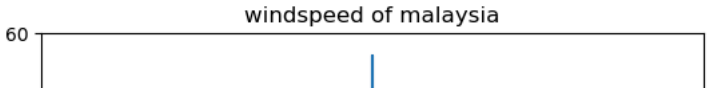
PLOT THE VALUES ARE STATIONS AND SOLARENERGY IN THE WEATHER DATASET

```
plt.plot(data['stations'], data['solarenergy'])
plt.xlabel('stations')
plt.ylabel('solarenergy')
plt.title('Weather of Malaysia')
plt.show()
```



PLOT THE VALUES ARE NAME AND WINDSPEED IN THE DATASET

```
plt.plot(data['name'], data['windspeed'])
plt.xlabel('name')
plt.ylabel('windspeed')
plt.title('windspeed of malaysia')
plt.show()
```



PLOT THE VALUES OF STATION AND SEALEVELPRESSURE IN THE WEATHER DATASET IN BARPLOT

```
import seaborn as sns
import numpy as np

sns.barplot(x = 'stations', y = 'sealevelpressure', data=data)
plt.xlabel('stations')
plt.ylabel('sealevelpressure')
plt.title('weather of stations')
plt.show()
```