

## weather exercise

May 28, 2024

```
[]: import numpy as np
     import pandas as pd
     from dataidea.datasets import loadDataset
[ ]: weather_data = loadDataset('weather')
[]: weather_data
[]:
               day
                    temperature
                                 windspead
                                              event
     0 01/01/2017
                           32.0
                                       6.0
                                               Rain
     1 04/01/2017
                            NaN
                                       9.0
                                              Sunny
                           28.0
     2 05/01/2017
                                       NaN
                                               Snow
     3 06/01/2017
                            NaN
                                       7.0
                                                NaN
     4 07/01/2017
                           32.0
                                       NaN
                                              Rain
     5 08/01/2017
                            NaN
                                       NaN
                                             Sunny
     6 09/01/2017
                            NaN
                                       NaN
                                                NaN
     7 10/01/2017
                           34.0
                                       8.0
                                            Cloudy
     8 11/01/2017
                           40.0
                                       12.0
                                              Sunny
[]: #How to replace values using the bfill() method
     weather_data['event'] = weather_data.event.bfill()
     weather_data
[]:
               day temperature
                                 windspead
                                              event
     0 01/01/2017
                           32.0
                                       6.0
                                               Rain
     1 04/01/2017
                                       9.0
                            NaN
                                              Sunny
     2 05/01/2017
                           28.0
                                       NaN
                                              Snow
     3 06/01/2017
                                       7.0
                            NaN
                                              Rain
     4 07/01/2017
                           32.0
                                       NaN
                                              Rain
     5 08/01/2017
                            NaN
                                       NaN
                                             Sunny
     6 09/01/2017
                                       NaN
                            NaN
                                            Cloudy
     7 10/01/2017
                           34.0
                                       8.0
                                             Cloudy
     8 11/01/2017
                           40.0
                                       12.0
                                              Sunny
[]: #How to fill/replace missing data for numeric and categorical data using the
      ⇔fillna()
     mean = weather_data.windspead.mean()
```

weather\_data['windspead'] = weather\_data.windspead.fillna(value=mean)
weather\_data

[]:		day	temperature	windspead	event
	0	01/01/2017	32.0	6.0	Rain
	1	04/01/2017	NaN	9.0	Sunny
	2	05/01/2017	28.0	8.4	Snow
	3	06/01/2017	NaN	7.0	Rain
	4	07/01/2017	32.0	8.4	Rain
	5	08/01/2017	NaN	8.4	Sunny
	6	09/01/2017	NaN	8.4	Cloudy
	7	10/01/2017	34.0	8.0	Cloudy
	8	11/01/2017	40.0	12.0	Sunny