## Missing value #2 (Fill nothing)

## 1. Mark N/A value with additional column

```
In [1]: import pandas as pd
        df = pd.read_excel('dataset.xlsx', sheet_name='missing')
In [2]: df.info()
        <class 'pandas.core.frame.DataFrame'>
        RangeIndex: 31 entries, 0 to 30
        Data columns (total 2 columns):
        # Column Non-Null Count Dtype
         0 Sex 31 non-null
1 Height 29 non-null
        dtypes: float64(1), object(1)
        memory usage: 624.0+ bytes
In [3]: df_add_col = df.copy()
df_add_col['mark'] = df_add_col['Height'].isnull()
In [4]: df_add_col
Out[4]: Sex Height mark
          0 F 162.0 False
        1 M 162.0 False
          2
            F
                  163.0 False
          3
             М
                  165.0 False
                  167.0 False
          5
             М
                  165.0 False
                  169.0 False
          7
                  155.0 False
          8
                  163.0 False
          9
              М
                  166.0 False
         10
                  162.0 False
         11
                  166.0 False
         12
             F
                  164.0 False
         13
                  164.0 False
             F
         14
                  161.0 False
         15
                  171.0 False
         16
                  160.0 False
                  151.0 False
         18
              F
                  162.0 False
         19
              M 170.0 False
         20
                  165.0 False
         21
                  NaN True
         22
             F
                  158.0 False
                 161.0 False
         23
              М
             F
         24
                  159.0 False
         25
             F
                  161.0 False
         26
             F
                  156.0 False
         27
             М
                  166.0 False
         28
                  NaN True
                 156.0 False
             F 152.0 False
```

## 2. Delete the row with N/A value

```
In [5]: df_del = df.copy()
In [6]: df_del = df_del.dropna(axis=0)
In [7]: df_del.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 29 entries, 0 to 30
Data columns (total 2 columns):
# Column Non-Null Count Dtype
------
0 Sex 29 non-null object
1 Height 29 non-null float64
dtypes: float64(1) object(1)
dtypes: float64(1), object(1) memory usage: 696.0+ bytes
```

[8]	1:	df_	del	
)ut[8]	:		Sex	Height
	_	0	F	162.0
		1	М	162.0
		2	F	163.0
		3	М	165.0
		4	М	167.0
		5	М	165.0
		6	М	169.0
		7	F	155.0
		8	М	163.0
		9	М	166.0
		10	М	162.0
		11	М	166.0
		12	F	164.0
		13	F	164.0
		14	F	161.0
		15	М	171.0
		16	F	160.0
		17	F	151.0
		18	F	162.0
		19	М	170.0
		20	М	165.0
		22	F	158.0

**23** M 161.0 **24** F 159.0

166.0

F 156.0

F 152.0

25 F 161.0 F 156.0

26 **27** M

29

30

In [ ]: