

## Method 1: using isnull function

```
In [23]: 1 import pandas as pd
          2 import numpy as np
          3
          4 data = {'x': [1,2,3,4,5,np.nan,6,7,np.nan,8,9,10,np.nan],
          5         'y': [11,12,np.nan,13,14,np.nan,15,16,np.nan,np.nan,17,np.nan,19]}
          6 df = pd.DataFrame(data)
          7
          8 print (df)
          9
         10
```

	x	y
0	1.0	11.0
1	2.0	12.0
2	3.0	NaN
3	4.0	13.0
4	5.0	14.0
5	NaN	NaN
6	6.0	15.0
7	7.0	16.0
8	NaN	NaN
9	8.0	NaN
10	9.0	17.0
11	10.0	NaN
12	NaN	19.0

```
In [36]: 1 # checking NaN in a cell
          2
          3 pd.isnull(df.iloc[5,0])
```

Out[36]: True

## Method 2: using isnan function

```
In [42]: 1 # We can also check the cell NaN value in dataframe
2 data = {'x': [1,2,3,4,5,np.nan,6,7,np.nan,8,9,10,np.nan],
3         'y': [11,12,np.nan,13,14,np.nan,15,16,np.nan,np.nan,17,np.nan,19]}
4 df = pd.DataFrame(data)
5 print(df)
6 value = df.at[5, 'x'] #nan
7 isNaN = np.isnan(value)
8 print("=====")
9 print("Is value at df[5, 'x'] NaN :", isNaN)
```

	x	y
0	1.0	11.0
1	2.0	12.0
2	3.0	NaN
3	4.0	13.0
4	5.0	14.0
5	NaN	NaN
6	6.0	15.0
7	7.0	16.0
8	NaN	NaN
9	8.0	NaN
10	9.0	17.0
11	10.0	NaN
12	NaN	19.0

=====

Is value at df[5, 'x'] NaN : True

## Method 3: using isnan in series

```
In [34]: 1 # We can also check the cell NaN value in dataframe series
2
3 series_df = pd.Series([2,3,np.nan,7,25])
4
5 print(series_df)
6 value = series_df[2] #nan
7 isNaN = np.isnan(value)
8 print("=====")
9 print("Is value at df[2] NaN :", isNaN)
```

```
0      2.0
```

```
1      3.0
```

```
2      NaN
```

```
3      7.0
```

```
4     25.0
```

```
dtype: float64
```

```
=====
```

```
Is value at df[2] NaN : True
```

## Method 4: using pandas.isna

```
In [41]: 1
2 data = {'x': [1,2,3,4,5,np.nan,6,7,np.nan,8,9,10,np.nan],
3          'y': [11,12,np.nan,13,14,np.nan,15,16,np.nan,np.nan,17,np.nan,19]}
4 df = pd.DataFrame(data)
5
6 print (df)
7
8 print("checking NaN value in cell [5, 0]")
9 pd.isna(df.iloc[5,0])
```

	x	y
0	1.0	11.0
1	2.0	12.0
2	3.0	NaN
3	4.0	13.0
4	5.0	14.0
5	NaN	NaN
6	6.0	15.0
7	7.0	16.0
8	NaN	NaN
9	8.0	NaN
10	9.0	17.0
11	10.0	NaN
12	NaN	19.0

checking NaN value in cell [5, 0]

Out[41]: True

## Method 5: using pandas.notnull method

```

In [39]: 1
          2 data = {'x': [1,2,3,4,5,np.nan,6,7,np.nan,8,9,10,np.nan],
          3             'y': [11,12,np.nan,13,14,np.nan,15,16,np.nan,np.nan,17,np.nan,19]}
          4 df = pd.DataFrame(data)
          5
          6 print (df)
          7
          8 print("checking NaN value in cell [5, 0]")
          9 pd.notnull(df.iloc[5,0])

```

```

      x      y
0    1.0  11.0
1    2.0  12.0
2    3.0   NaN
3    4.0  13.0
4    5.0  14.0
5    NaN   NaN
6    6.0  15.0
7    7.0  16.0
8    NaN   NaN
9    8.0   NaN
10   9.0  17.0
11  10.0   NaN
12   NaN  19.0
checking NaN value in cell [5, 0]

```

Out[39]: False

```
In [ ]: 1
```

```
In [ ]: 1
```