## Handling Missing Values



Pandas Replace | Handling Missing Values Using Pandas

### Replace "Priyang" with "Anil".

```
Name
           Marks
                        Grades
  Priyang
           98.0
                           NaN
   Aadhya
            NaN
                            AB
   Krisha
          99.0
                            AA
          87.0
   Vedant
                           NaN
   Parshv
           90.0
                            ΑC
   Mittal NaN
                            BA
6 Archana 82.0 not available
  Priyang
            78.0
                           -99
```

```
import pandas as pd
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace(to_replace="Priyang",value="Anil")
print(sr)
```

oraucs		riai No	Name	
NaN		98.0	Anil	0
AB		NaN	Aadhya	1
AA		99.0	Krisha	2
NaN		87.0	Vedant	3
AC		90.0	Parshv	4
BA		NaN	Mittal	5
available	not	82.0	Archana	6
-99		78.0	Anil	7

Marks

Brades

### Replace "Priyang" & "Aadhya" with "Anil"

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace( to_replace: ["Priyang", "Aadhya"], value: "Anil")
print(sr)
```

	, ,		
	Name	Marks	Grades
0	Anil	98.0	NaN
1	Anil	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	NaN
4	Parshv	90.0	AC
5	Mittal	NaN	ВА
6	Archana	82.0	not available
7	Anil	78.0	-99

#### Replace NaN with 4o

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace(np.nan, value: 40)
print(sr)
```

	,9			
	Name	Marks	Grades	
0	Priyang	98.0	40	
1	Aadhya	40.0	AB	
2	Krisha	99.0	AA	
3	Vedant	87.0	40	
4	Parshv	90.0	AC	
5	Mittal	40.0	ВА	
6	Archana	82.0	not available	
7	Priyang	78.0	-99	

#### Replace Marks column NaN with 40 and column NaN with FF

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace({"Marks":{np.nan:40},"Grades":{np.nan:"FF"}})
print(sr)
```

	Name	Marks	Grades
0	Priyang	98.0	FF
1	Aadhya	40.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	FF
4	Parshv	90.0	AC
5	Mittal	40.0	BA
6	Archana	82.0	not available
7	Priyang	78.0	-99

#### Replace "not available" ,np.nan,"-99" of Grades column to FF

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace( to_replace: {"Grades":["not available"_np.nan_"-99"]}_ value: "FF")
print(sr)
```

	, ,		
	Name	Marks	Grades
0	Priyang	98.0	FF
1	Aadhya	NaN	AB
2	Krisha	99.0	AA
3	Vedant	87.0	FF
4	Parshv	90.0	AC
5	Mittal	NaN	BA
6	Archana	82.0	FF
7	Priyang	78.0	FF

#### Replace Grade Values

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace( to_replace: ["FF"_"AA"_"AB"_"BA"]_ value: ["FAIL"_"VERY GOOD"_"EXCELLENT"_"GOOD"])
print(sr)
```

-			/	-
Grades		Marks	Name	
NaN		98.0	Priyang	0
EXCELLENT		NaN	Aadhya	1
VERY GOOD		99.0	Krisha	2
NaN		87.0	Vedant	3
AC		90.0	Parshv	4
GOOD		NaN	Mittal	5
available	not	82.0	Archana	6
-99		78.0	Priyang	7

#### Replace NaN values with ffill

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Downloads\\data_#na.csv")
print(data)
sr=data.replace(np.nan,method="ffill",limit=1)
print(sr)
```

	Name	Marks	Grades
6	Priyang	98.0	NaN
1	Aadhya	98.0	AB
2	Krisha	99.0	AA
3	Vedant	87.0	AA
4	Parshv	90.0	AC
5	Mittal	90.0	BA
6	Archana	82.0	not available
7	Priyang	78.0	-99

#### Clear data of Marks column using Regex

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Desktop\\minipro.csv")
print(data)
sr=data.replace( to_replace: {"Marks":"[A-Za-z]"}, value: " "_regex=True)
print(sr)
```

	Name	Marks	Grades	
0	Priyang	98	NaN	
1	Aadhya	NaN	AB	
2	Krisha	99	AA	
3	Vedant	NaN	NaN	
4	Parshv	90	AC	
5	Mittal	NaN	BA	
6	Archana	82	NaN	
7	Priyang	78	-99	

#### Replace NaN values of Marks column with O

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Desktop\\minipro.csv")
print(data)
sr=data.replace( to_replace: {"Marks":np.nan}, value: 0)
print(sr)
```

	Name	Marks	Grades	
0	Priyang	98M	NaN	
1	Aadhya	0	AB	
2	Krisha	99M	AA	
3	Vedant	0	NaN	
4	Parshv	90M	AC	
5	Mittal	0	BA	
6	Archana	82M	NaN	
7	Priyang	78M	-99	

# Replace NaN value(first only) of Grades column with "FF" using 'at' method

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Desktop\\minipro.csv")
print(data)
data.at[0, "Grades"]="FF"
print(data)
                           Name Marks Grades
                        Priyang
                                  98M
                                          FF
                                          AB
                         Aadhya
                                  NaN
                         Krisha
                                  99M
                                          AA
                         Vedant
                                  NaN
                                         NaN
                        Parshv
                                  90M
                                          AC
                         Mittal
                                  NaN
                                          BA
                                  82M
                        Archana
                                         NaN
                        Priyang
                                  78M
                                          -99
```

# Replace NaN value of Marks column with 0 using iat method

```
import pandas as pd
import numpy as np
data=pd.read_csv("C:\\Users\\Dell\\Desktop\\minipro.csv")
print(data)
data.iat[1,1]=0
print(data)
                         Name Marks Grades
                     Priyang
                                98M
                                       NaN
                      Aadhya
                                        AB
                      Krisha
                                99M
                                        AA
                      Vedant
                                NaN
                                       NaN
                      Parshy
                                90M
                                        AC
                      Mittal
                                        BA
                                NaN
                                82M
                     Archana
                                       NaN
                     Privana
                                78M
                                        -99
```