untitled1-1

August 29, 2023

```
import pandas as pd
[1]:
[6]: data = {
       'Name' : ['Alice', 'Bob', 'Charlie', 'David', 'Harish', 'Jayanth', |
      →'Kevin','Mukul', 'Sashi', 'Prasad'],
       'Age' : [19,18,20,21,22,23,19,20,20,19],
       'Number' : [1,2,3,4,5,6,7,8,9,10],
       'Marks' : [15,14,16,12,18,20,17,19,19,19],
       'City' : ['New York', 'New Jersey', 'Sydney', 'Dubai', _
      →'Washington','Vietnam', 'Singapore', 'England', 'Denmark', 'Scotland']
     }
[7]: df = pd.DataFrame(data)
[8]: print(df)
          Name
                 Age
                      Number
                              Marks
                                            City
    0
         Alice
                  19
                           1
                                  15
                                        New York
    1
           Bob
                  18
                           2
                                  14
                                      New Jersey
       Charlie
    2
                  20
                           3
                                  16
                                          Sydney
    3
         David
                  21
                           4
                                           Dubai
                                  12
    4
        Harish
                  22
                           5
                                  18
                                      Washington
       Jayanth
                  23
                                  20
                                         Vietnam
    5
                           6
         Kevin
    6
                  19
                           7
                                  17
                                       Singapore
         Mukul
    7
                  20
                           8
                                  19
                                         England
    8
         Sashi
                                  19
                                         Denmark
                  20
                           9
    9
        Prasad
                  19
                          10
                                  19
                                        Scotland
[9]: df.info()
    <class 'pandas.core.frame.DataFrame'>
    RangeIndex: 10 entries, 0 to 9
    Data columns (total 5 columns):
     #
         Column
                 Non-Null Count
                                  Dtype
     0
         Name
                  10 non-null
                                   object
                                   int64
     1
                  10 non-null
         Age
         Number 10 non-null
                                   int64
```

```
3 Marks 10 non-null int64
4 City 10 non-null object
dtypes: int64(3), object(2)
```

dtypes: int64(3), object(2 memory usage: 528.0+ bytes

[10]: print(df.describe())

```
Age
                     Number
                                  Marks
count
       10.000000
                   10.00000
                              10.000000
mean
       20.100000
                    5.50000
                              16.900000
                    3.02765
                               2.601282
std
        1.523884
       18.000000
                    1.00000
                              12.000000
min
25%
       19.000000
                    3.25000
                              15.250000
50%
       20.000000
                    5.50000
                              17.500000
75%
       20.750000
                    7.75000
                              19.000000
       23.000000
                   10.00000
                              20.000000
max
```

[11]: observation = df.loc[3]

[12]: print(observation)

Name David
Age 21
Number 4
Marks 12
City Dubai

Name: 3, dtype: object

[13]: null_values = df.isnull()

[14]: print(null_values)

```
Name
           Age
               Number
                       Marks
                              City
0 False
        False
                False
                       False False
                False False False
1 False
         False
2 False False
                False False False
3 False False
                False False False
4 False False
                False False False
5 False False
                False False False
6 False False
                False False False
7 False
         False
                False
                       False False
8 False
                       False False
         False
                False
 False False
                False False False
```