```
In [3]: import pandas
        mydataset = {
          'cars': ["BMW", "Volvo", "Ford"],
           'passings': [3, 7, 2]
        myvar = pandas.DataFrame(mydataset)
        print(myvar)
            cars
                  passings
        0
             BMW
                          3
                          7
        1
          Volvo
        2
            Ford
                          2
        import pandas as pd
        mydataset = {
          'cars': ["BMW", "Volvo", "Ford"],
          'passings': [3, 7, 2]
        }
        myvar = pandas.DataFrame(mydataset)
        print(myvar)
In [8]: import pandas
        veg_menu={
             'veg':['panneer','dal','cauliflower','carrot'],
            'cost':['150','50','78','90']
        }
        nonveg_menu={
             'non-veg':['chicken','crabs','prawns','egg'],
             'cost':['300','550','870','170']
        }
        print(pandas.DataFrame(veg_menu))
        print(pandas.DataFrame(nonveg menu))
                    veg cost
                panneer
        0
                         150
        1
                    dal
                          50
        2
           cauliflower
                          78
        3
                carrot
                          90
           non-veg cost
        0
           chicken 300
        1
             crabs 550
        2
            prawns 870
        3
                egg 170
```

```
In [22]: import pandas
         order=pandas.read_csv('E:\\menu1.csv')
         print(order.to_string())
                   order
                          cost
         0
                 panneer
                           600
         1
                           200
                     dal
         2
            cauliflower
                           399
         3
                           400
                  carrot
         4
                 chicken
                           800
         5
                   crabs
                           800
         6
                  prawns
                           670
In [14]: import pandas
         details={
              'name':['manaswini','sai','ratna'],
             'age':['18','45','37'],
              'gender':['female','male','female']
         mydataset=pandas.DataFrame(details)
         filename='familydata.xlsx'
         mydataset.to excel(filename)
         print(mydataset)
                  name age gender
         0
            manaswini 18
                           female
                   sai 45
         1
                              male
         2
                 ratna
                       37 female
In [15]: import pandas as pd
         a = [1,2,3]
         m= pd.Series(a)
         print(m)
         0
              1
              2
         1
         2
              3
         dtype: int64
In [16]: import pandas as pd
         a = [1, 7, 2]
         m = pd.Series(a, index = ["x", "y", "z"])
         print(m)
         Х
              1
              7
         У
              2
         dtype: int64
```

```
In [17]: import pandas as pd
         calories = {"day1": 420, "day2": 380, "day3": 390}
         myvar = pd.Series(calories)
         print(myvar)
         day1
                  420
         day2
                  380
         day3
                  390
         dtype: int64
In [19]: import pandas as pd
         calories = {"day1": 420, "day2": 380, "day3": 390}
         m = pd.Series(calories, index = ["day1", "day2"])
         print(m)
         day1
                  420
         day2
                  380
         dtype: int64
 In [ ]: import pandas as pd
         data = {
           "calories": [420, 380, 390],
           "duration": [50, 40, 45]
         m = pd.DataFrame(data)
         print(m)
In [25]: import pandas as pd
         data = {
           "calories": [420, 380, 390],
           "duration": [50, 40, 45]
         m = pd.DataFrame(data)
         print(m)
         print(m.loc[0])
         print(m.loc[[0, 1]])
            calories duration
         0
                  420
                             50
         1
                  380
                             40
                  390
                             45
         2
         calories
                      420
         duration
                       50
         Name: 0, dtype: int64
            calories duration
         0
                  420
                             50
         1
                  380
                             40
```

```
In [26]: import pandas as pd
         data = {
            "calories": [420, 380, 390],
            "duration": [50, 40, 45]
         df = pd.DataFrame(data, index = ["day1", "day2", "day3"])
         print(df)
         print(df.loc["day2"])
                calories duration
         day1
                     420
                                50
                                40
         day2
                     380
         day3
                     390
                                45
         calories
                      380
         duration
                       40
         Name: day2, dtype: int64
In [27]: import pandas as pd
         df = pd.read_csv('data.csv')
         print(df)
                name price
         0
               apple
                       1000
         1
            samsung
                        450
         2
                         10
                 pen
         3
                       4500
               bench
         4
             iphone
                     75000
         5
                       9000
              watch
             marker
                         20
In [28]: import pandas as pd
         df = pd.read_csv('data.csv')
         print(df.to_string())
                name price
                       1000
         0
               apple
         1
            samsung
                        450
         2
                 pen
                         10
         3
                       4500
               bench
         4
             iphone
                     75000
         5
                       9000
               watch
             marker
                         20
In [29]: import pandas as pd
         print(pd.options.display.max rows)
         60
```

```
import pandas as pd
pd.options.display.max_rows = 9999
df = pd.read_csv('data.csv')
print(df)
```

```
price
      name
0
             1000
     apple
1
   samsung
              450
2
       pen
               10
3
             4500
     bench
4
           75000
    iphone
5
             9000
     watch
    marker
               20
```

```
In [32]: import pandas as pd
         df = pd.read json('data.json')
         print(df.to string())
         ValueError
                                                    Traceback (most recent call last)
         ~\AppData\Local\Temp/ipykernel 7584/855483702.py in <module>
               1 import pandas as pd
         ----> 3 df = pd.read json('data.json')
               5 print(df.to string())
         E:\anaconda3\lib\site-packages\pandas\util\ decorators.py in wrapper(*args, **k
         wargs)
             205
                                  else:
             206
                                      kwargs[new arg name] = new arg value
         --> 207
                              return func(*args, **kwargs)
             208
             209
                          return cast(F, wrapper)
         E:\anaconda3\lib\site-packages\pandas\util\ decorators.py in wrapper(*args, **k
         wargs)
                                      stacklevel=stacklevel,
             309
             310
         --> 311
                              return func(*args, **kwargs)
             312
             313
                          return wrapper
         E:\anaconda3\lib\site-packages\pandas\io\json\ json.py in read json(path or bu
         f, orient, typ, dtype, convert_axes, convert_dates, keep_default_dates, numpy,
          precise float, date unit, encoding, encoding errors, lines, chunksize, compres
         sion, nrows, storage options)
             612
             613
                     with json reader:
                          return json reader.read()
         --> 614
             615
             616
         E:\anaconda3\lib\site-packages\pandas\io\json.py in read(self)
             746
                                  obj = self._get_object_parser(self._combine_lines(data_
         lines))
             747
                          else:
         --> 748
                              obj = self._get_object_parser(self.data)
             749
                          self.close()
                          return obj
             750
         E:\anaconda3\lib\site-packages\pandas\io\json\ json.py in get object parser(se
         lf, json)
             768
                          obj = None
             769
                          if typ == "frame":
         --> 770
                              obj = FrameParser(json, **kwargs).parse()
             771
                          if typ == "series" or obj is None:
             772
```

```
E:\anaconda3\lib\site-packages\pandas\io\json\_json.py in parse(self)
    883
    884
                else:
--> 885
                    self._parse_no_numpy()
    886
                if self.obj is None:
    887
E:\anaconda3\lib\site-packages\pandas\io\json\_json.py in _parse_no_numpy(self)
                if orient == "columns":
   1138
                    self.obj = DataFrame(
   1139
-> 1140
                        loads(json, precise_float=self.precise_float), dtype=No
ne
   1141
                    )
                elif orient == "split":
   1142
```

ValueError: Expected object or value

```
In [33]: import pandas as pd
          data = {
            "Duration":{
              "0":60,
              "1":60,
              "2":60,
              "3":45,
              "<mark>4</mark>":45,
              "5":60
            },
            "Pulse":{
              "0":110,
              "1":117,
              "2":103,
              "3":109,
              "4":117,
              "5":102
            },
            "Maxpulse":{
              "0":130,
              "1":145,
              "2":135,
              "3":175,
              "4":148,
              "5":127
            },
            "Calories":{
              "0":409,
              "1":479,
              "2":340,
              "3":282,
              "4":406,
              "5":300
            }
          }
          df = pd.DataFrame(data)
          print(df)
```

	Duration	Pulse	Maxpulse	Calories
0	60	110	130	409
1	60	117	145	479
2	60	103	135	340
3	45	109	175	282
4	45	117	148	406
5	60	102	127	300

```
In [40]: import pandas as pd
         df = pd.read csv('data.csv')
         print(df.head(6))
                name price
         0
              apple
                       1000
         1
                        450
            samsung
         2
                         10
                 pen
         3
                       4500
              bench
         4
              iphone
                     75000
         5
              watch
                       9000
In [42]: import pandas as pd
         df = pd.read_csv('data.csv')
         print(df.head())
         print(df.tail())
         print(df.info())
                name price
         0
              apple
                       1000
         1
            samsung
                        450
         2
                         10
                 pen
         3
              bench
                       4500
         4
             iphone 75000
              name
                     price
         2
                pen
                        10
                      4500
         3
             bench
         4
            iphone
                     75000
         5
                      9000
             watch
         6 marker
                        20
         <class 'pandas.core.frame.DataFrame'>
         RangeIndex: 7 entries, 0 to 6
         Data columns (total 2 columns):
              Column Non-Null Count Dtype
          0
              name
                       7 non-null
                                       object
              price
                       7 non-null
                                       int64
         dtypes: int64(1), object(1)
         memory usage: 240.0+ bytes
         None
In [12]: #EMPTY CELL DELETE
         import pandas as pd
         df = pd.read_csv('E:\\details.csv')
         new df = df.dropna()
         print(new_df.to_string())
                       AGE GENDER
                NAME
                MANU 18.0
                                F
         0
                                F
         1
            DEDIPYA 23.0
            JAHNAVI
                     19.0
                                F
```

```
In [11]: #Replace NULL values with the number 130:
         import pandas as pd
         df = pd.read_csv('E:\\details.csv')
         df.fillna(30, inplace = True)
         print(df.to_string())
               NAME
                      AGE GENDER
               MANU 18.0
                                F
         0
                                F
         1
            DEDIPYA 23.0
                                F
         2
             HARSHI
                     30.0
            JAHNAVI 19.0
                                F
In [14]: import pandas as pd
         df = pd.read csv('E:\\Book1.csv')
         new_df = df.dropna()
         print(new df.to string())
         filename='Book2.xlsx'
         new_df.to_excel(filename)
            S.NO
                      NAME
                                           PHONE
                                CITY
         0
                      MANU
               1
                              VIZAG 1234567890
         2
               3
                  HARSHITA PMPALEM 8779742657
In [25]: import pandas as pd
         df = pd.read csv('E:\\Book3.csv')
         df["calories"].fillna(2000 ,inplace = True)
         print(df.to string())
             name calories
                             pulse
             manu
                      200.0
                             110.0
         1
            deepu
                     2000.0 112.0
             dedi
                     2300.0 111.0
         2
                     1456.0
         3 harsh
                               NaN
         import pandas as pd
In [28]:
         df = pd.read_csv('E:\\mean.csv')
         x = df["marks"].mean()
         df["marks"].fillna(x, inplace = True)
         print(df.to_string())
            s.no
                      marks
                              age
               1 23.000000
         0
                              18
         1
               2 34.000000
                              19
         2
               3 56.000000
                              20
         3
               4 37.666667
                              44
```

```
In [29]: import pandas as pd
          df = pd.read csv('E:\\mean.csv')
          x = df["marks"].mode()
          df["marks"].fillna(x, inplace = True)
          print(df.to string())
                   marks
             s.no
                           age
          0
                1
                     23.0
                            18
          1
                2
                     34.0
                            19
          2
                3
                     56.0
                            20
          3
                4
                      NaN
                            44
          import pandas as pd
In [30]:
          df = pd.read_csv('E:\\mean.csv')
          x = df["marks"].median()
          df["marks"].fillna(x, inplace = True)
          print(df.to_string())
             s.no
                   marks
                           age
          0
                     23.0
                1
                            18
          1
                2
                     34.0
                            19
          2
                3
                     56.0
                            20
          3
                4
                     34.0
                            44
In [22]:
         # family members
          import pandas as pd
          df = pd.read_csv('E:\\familymembers.csv')
          print(df.to string())
          df.drop duplicates(inplace=True)
              s.n0
                         name
                                age gender
                                             phno
                                                   address
          0
                 1
                         manu
                                 18
                                         f
                                            4534
                                                        nad
          1
                  2
                        deepu
                                 19
                                            2335
                                         m
                                                        nad
                                         f
          2
                  3
                                 20
                                            3456
                       chandu
                                                   pmpalem
          3
                 4
                      jahnavi
                                 21
                                         f
                                            4556
                                                        kpc
          4
                 5
                          sai
                                 22
                                            4562
                                                        kgh
                                         m
          5
                 6
                        ratna
                                 23
                                         f
                                            3695
                                                       cvp
                 7
                                         f
          6
                       dedipa
                                 24
                                            3577
                                                       svp
          7
                 8
                                         f
                     harshita
                                 24
                                            6789
                                                       fes
          8
                 9
                       hemika
                                 25
                                         f
                                            8765
                                                       bgt
          9
                10
                                         f
                                             967
                         rama
                                 26
                                                      lkhg
                                            6784
                                         f
          10
                11
                      likhita
                                 27
                                                      gujg
          11
                12
                      nikitha
                                 28
                                         f
                                            2398
                                                      khjg
                                 29
                                         f
          12
                13
                       sonika
                                            3457
                                                      jhcf
          13
                14
                                 20
                                         f
                                            5679
                                                     kjgvh
                       preeti
                                         f
          14
                15
                                 30
                                            9783
                       pavani
                                                     kufgh
          15
                16
                        pandu
                                 32
                                         m
                                            6798
                                                    jlkgve
                17
                                 31
                                         f
          16
                        geetu
                                            6798
                                                    jgghgk
          17
                18
                      meghana
                                 33
                                         f
                                            8576
                                                     ljhjf
          18
                19
                        ramya
                                 34
                                         f
                                            4139
                                                     mnhf1
                                 23
          19
                20
                         dsai
                                            4567
                                         m
                                                     gjxmh
```

```
dob passport license
        name
               age gender
0
        manu
                18
                         f
                            01-02-03
                                            yes
                                                     yes
1
                18
                            03-03-03
       deepu
                         m
                                            yes
                                                     yes
2
      chandu
                34
                         f
                            04-04-83
                                            yes
                                                      no
3
                27
                         f
                            03-07-00
                                                     yes
        rosy
                                             no
4
          sai
                32
                            06-06-03
                         m
                                             no
                                                     yes
5
                         f
       ratna
                            07-07-76
                66
                                            yes
                                                     yes
                         f
6
      hemika
                33
                            02-03-82
                                            yes
                                                      no
                            05-06-92
7
      dedipa
                22
                         f
                                            yes
                                                     yes
8
    harshita
                13
                         f
                            06-06-54
                                            yes
                                                     yes
9
       snaha
                33
                         f
                            03-05-06
                                                     yes
                                             no
10
       sreya
                31
                         f
                            04-05-07
                                            yes
                                                      no
                         f
11
       sreya
                13
                            04-05-21
                                            yes
                                                     yes
12
                32
                         f
                            02-02-82
       ramya
                                            yes
                                                     yes
13
      reshma
                23
                         f
                            01-01-00
                                            yes
                                                      no
14
     meghana
                42
                         f
                            04-03-84
                                            yes
                                                     yes
15
      deepak
                44
                            09-03-82
                         m
                                            yes
                                                     yes
16
         rama
                74
                         m
                            02-11-64
                                            yes
                                                     yes
17
      sonika
                24
                         f
                            03-09-54
                                             no
                                                     yes
18
      harini
                19
                         f
                            05-08-92
                                            yes
                                                      no
19
       asdsf
                45
                            07-03-34
                                             no
                                                     yes
```

```
In [21]: #COLOUMN DUPLICATE
import pandas as pd
df = pd.read_csv('E:\\passport.csv')
df.drop_duplicates('age',inplace=True)
print(df.to_string())
```

```
dob passport license
        name
               age gender
0
                18
                         f
                            01-02-03
        manu
                                            yes
                                                     yes
2
      chandu
                34
                         f
                            04-04-83
                                            yes
                                                      no
3
                27
                            03-07-00
         rosy
                                             no
                                                     yes
4
          sai
                32
                            06-06-03
                                             no
                         m
                                                     yes
5
       ratna
                66
                         f
                            07-07-76
                                            yes
                                                     yes
                         f
6
      hemika
                33
                            02-03-82
                                            yes
                                                      no
7
      dedipa
                22
                         f
                            05-06-92
                                            yes
                                                     yes
                            06-06-54
8
    harshita
                13
                         f
                                            yes
                                                     yes
10
       sreya
                31
                         f
                            04-05-07
                                            yes
                                                      no
                23
                         f
13
      reshma
                            01-01-00
                                                      no
                                            yes
14
     meghana
                42
                         f
                            04-03-84
                                            yes
                                                     yes
15
      deepak
                44
                            09-03-82
                         m
                                            yes
                                                     yes
16
                74
                            02-11-64
        rama
                         m
                                            yes
                                                     yes
17
      sonika
                24
                         f
                            03-09-54
                                             no
                                                     yes
18
      harini
                19
                         f
                            05-08-92
                                            yes
                                                      no
       asdsf
                45
19
                            07-03-34
                                             no
                                                     yes
```

In []:	
In []:	