Read data from sources using pandas

In [9]:
```
import pandas as pd
from io import StringIO
Data = '{"employee_name": "James", "email": "james@gmail.com", "job_profile": [{"title":"Team Lead", "title2": "Sr. Developer"}]}'
df=pd.read_json(StringIO(Data))
```

In [11]:
```
df
```

Out[11]:

	employee_name	email	job_profile
0	James	james@gmail.com	{'title': 'Team Lead', 'title2': 'Sr. Developer'}

In [15]:
```
df.to_json()
```

Out[15]:
```
'{"employee_name":{"0":"James"},"email":{"0":"james@gmail.com"},"job_profile":{"0":{"title":"Team Lead","title2":"Sr. Developer"}}}'
```

In [19]:
```
df.to_json(orient='index')  # default is index
```

Out[19]:
```
'{"0":{"employee_name":"James","email":"james@gmail.com","job_profile":{"title":"Team Lead","title2":"Sr. Developer"}}}'
```

In [21]:
```
df.to_json(orient='records')
```

Out[21]:
```
'[{"employee_name":"James","email":"james@gmail.com","job_profile":{"title":"Team Lead","title2":"Sr. Developer"}}]'
```

In [33]:
```
df=pd.read_csv("https://archive.ics.uci.edu/ml/machine-learning-databases/wine/wine.data",header=None)
df.head()
```

Out[33]:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13
0	1	14.23	1.71	2.43	15.6	127	2.80	3.06	0.28	2.29	5.64	1.04	3.92	1065
1	1	13.20	1.78	2.14	11.2	100	2.65	2.76	0.26	1.28	4.38	1.05	3.40	1050
2	1	13.16	2.36	2.67	18.6	101	2.80	3.24	0.30	2.81	5.68	1.03	3.17	1185
3	1	14.37	1.95	2.50	16.8	113	3.85	3.49	0.24	2.18	7.80	0.86	3.45	1480
4	1	13.24	2.59	2.87	21.0	118	2.80	2.69	0.39	1.82	4.32	1.04	2.93	735

In [37]:
```
df.to_csv("wine") #csv file had beeen created from url
```

In [39]:
```
!pip install lxml
```

```
Requirement already satisfied: lxml in e:\software\ide\anaconda\lib\site-packages (5.2.1)
```

In [41]:
```
url="https://www.fdic.gov/bank/individual/failed/banklist.html"
df=pd.read_html(url)
```

In [43]:
```
df
```

Out[43]:
```
[                            Bank Name              City        State  \
 0                  Pulaski Savings Bank           Chicago      Illinois
 1    The First National Bank of Lindsay           Lindsay      Oklahoma
 2  Republic First Bank dba Republic Bank      Philadelphia  Pennsylvania
 3                         Citizens Bank          Sac City          Iowa
 4               Heartland Tri-State Bank           Elkhart        Kansas
 5                     First Republic Bank     San Francisco    California
 6                        Signature Bank          New York      New York
 7                     Silicon Valley Bank       Santa Clara    California
 8                       Almena State Bank            Almena        Kansas
 9             First City Bank of Florida  Fort Walton Beach       Florida

     Cert               Acquiring Institution      Closing Date  \
 0  28611                     Millennium Bank  January 17, 2025
 1   4134   First Bank & Trust Co., Duncan, OK  October 18, 2024
 2  27332    Fulton Bank, National Association    April 26, 2024
 3   8758           Iowa Trust & Savings Bank  November 3, 2023
 4  25851              Dream First Bank, N.A.     July 28, 2023
 5  59017           JPMorgan Chase Bank, N.A.       May 1, 2023
 6  57053                Flagstar Bank, N.A.    March 12, 2023
 7  24735  First Citizens Bank & Trust Company    March 10, 2023
 8  15426                        Equity Bank  October 23, 2020
 9  16748           United Fidelity Bank, fsb  October 16, 2020

    Fund  Sort ascending
 0                10548
 1                10547
 2                10546
 3                10545
 4                10544
 5                10543
 6                10540
 7                10539
 8                10538
 9                10537  ]
```

In [49]:
```
!pip install html5lib
!pip install beautifulsoup4
```

```
Requirement already satisfied: html5lib in e:\software\ide\anaconda\lib\site-packages (1.1)
Requirement already satisfied: six>=1.9 in e:\software\ide\anaconda\lib\site-packages (from html5lib) (1.16.0)
Requirement already satisfied: webencodings in e:\software\ide\anaconda\lib\site-packages (from html5lib) (0.5.1)
Requirement already satisfied: beautifulsoup4 in e:\software\ide\anaconda\lib\site-packages (4.12.3)
Requirement already satisfied: soupsieve>1.2 in e:\software\ide\anaconda\lib\site-packages (from beautifulsoup4) (2.5)
```

In [53]:
```
url="https://en.wikipedia.org/wiki/Mobile_country_code"
pd.read_html(url, match="Country", header=0)
# to print the table which has the keyword Country
```

Out[53]:
```
[     Mobile country code                                Country ISO 3166  \
 0                    289                              A Abkhazia    GE-AB
 1                    412                             Afghanistan       AF
 2                    276                                 Albania       AL
 3                    603                                 Algeria       DZ
 4                    544  American Samoa (United States of America)       AS
 ..                   ...                                     ...      ...
 247                  452                                 Vietnam       VN
 248                  543                     W Wallis and Futuna       WF
 249                  421                                 Y Yemen       YE
 250                  645                                Z Zambia       ZM
 251                  648                                Zimbabwe       ZW

                                Mobile network codes National MNC authority  \
 0            List of mobile network codes in Abkhazia                    NaN
 1         List of mobile network codes in Afghanistan                    NaN
 2             List of mobile network codes in Albania                    NaN
 3             List of mobile network codes in Algeria                    NaN
 4      List of mobile network codes in American Samoa                    NaN
 ..                                               ...                    ...
 247       List of mobile network codes in the Vietnam                    NaN
 248  List of mobile network codes in Wallis and Futuna                    NaN
 249         List of mobile network codes in the Yemen                    NaN
 250            List of mobile network codes in Zambia                    NaN
 251          List of mobile network codes in Zimbabwe                    NaN

                      Remarks
 0    MCC is not listed by ITU
 1                         NaN
 2                         NaN
 3                         NaN
 4                         NaN
 ..                        ...
 247                       NaN
 248                       NaN
 249                       NaN
 250                       NaN
 251                       NaN

 [252 rows x 6 columns]]
```

In [59]:
```
df_excel= pd.read_excel('data.xlsx')  #pip install openpyxl
```

In [61]:
```
df_excel
```

Out[61]:

	name	age
0	krish	32
1	jack	34
2	john	43

In [67]:
```
df_excel.to_pickle('df_pickle')
```

In [69]:
```
pd.read_pickle('df_pickle')
```

Out[69]:

	name	age
0	krish	32
1	jack	34
2	john	43

In [ ]: