In [1]:
```
import pandas as pd
import seaborn as sns
import numpy as np
import matplotlib.pyplot as plt
```

In [2]:
```
iris=pd.read_csv(r"C:\Users\student\Desktop\result1.csv")
```

In [3]:
```
print(iris.shape)
```

```
(10, 5)
```

In [4]:
```
print(iris.columns)
```

```
Index(['name', 'roll no', 'maths', 'phy', 'chem'], dtype='object')
```

In [5]:
```
iris["maths"].value_counts()
```

Out[5]:
```
56    1
61    1
76    1
89    1
57    1
87    1
85    1
82    1
79    1
96    1
Name: maths, dtype: int64
```

In [6]:
```
import pandas as pd
iris=pd.read_csv("/home/jovyan/demo/data/iris.csv")
print(iris)
```

```
---------------------------------------------------------------------------
FileNotFoundError                         Traceback (most recent call last)
<ipython-input-6-e30f04389ce7> in <module>
      1 import pandas as pd
----> 2 iris=pd.read_csv("/home/jovyan/demo/data/iris.csv")
      3 print(iris)

~\anaconda3\lib\site-packages\pandas\io\parsers.py in read_csv(filepath_or_buffer, sep, delimiter, header, names, index_col, usecols, squeeze, prefix, mangle_dupe_cols, dtype, engine, converters, true_values, false_values, skipinitialspace, skiprows, skipfooter, nrows, na_values, keep_default_na, na_filter, verbose, skip_blank_lines, parse_dates, infer_datetime_format, keep_date_col, date_parser, dayfirst, cache_dates, iterator, chunksize, compression, thousands, decimal, lineterminator, quotechar, quoting, doublequote, escapechar, comment, encoding, dialect, error_bad_lines, warn_bad_lines, delim_whitespace, low_memory, memory_map, float_precision)
    684     )
    685
--> 686     return _read(filepath_or_buffer, kwds)
    687
    688

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _read(filepath_or_buffer, kwds)
    450
    451     # Create the parser.
--> 452     parser = TextFileReader(fp_or_buf, **kwds)
    453
    454     if chunksize or iterator:

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, f, engine, **kwds)
    944             self.options["has_index_names"] = kwds["has_index_names"]
    945
--> 946         self._make_engine(self.engine)
    947
    948     def close(self):

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _make_engine(self, engine)
   1176     def _make_engine(self, engine="c"):
   1177         if engine == "c":
-> 1178             self._engine = CParserWrapper(self.f, **self.options)
   1179         else:
   1180             if engine == "python":

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, src, **kwds)
   2006         kwds["usecols"] = self.usecols
   2007
-> 2008         self._reader = parsers.TextReader(src, **kwds)
   2009         self.unnamed_cols = self._reader.unnamed_cols
   2010
```

```
pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader.__cinit__()

pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader._setup_parser_sourc
e()

FileNotFoundError: [Errno 2] No such file or directory: '/home/jovyan/demo/dat
a/iris.csv'
```

In [7]:
```
import pandas as pd
iris=pd.read_csv(r"C:\Users\student\Desktop\iris.csv")
print(iris)
```

```
     sepal_length  sepal_width petal_length  petal_width    species
0             5.1          3.5          1.4          0.2         se
1             4.9          3.0          1.4          0.2     setosa
2             4.7          3.2          1.3          0.2     setosa
3             4.6          3.1          1.5          0.2     setosa
4             5.0          3.6          1.4          0.2     setosa
..            ...          ...          ...          ...        ...
146           6.3          2.5            5          1.9  virginica
147           6.5          3.0          5.2          2.0  virginica
148           6.2          3.4          5.4          2.3  virginica
149           5.9          3.0          5.1          1.8  virginica
150           5.8          3.2          5,2          NaN  virginica

[151 rows x 5 columns]
```

In [8]:
```
print(iris.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 151 entries, 0 to 150
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   sepal_length  151 non-null    float64
 1   sepal_width   151 non-null    float64
 2   petal_length  151 non-null    object
 3   petal_width   150 non-null    float64
 4   species       151 non-null    object
dtypes: float64(3), object(2)
memory usage: 6.0+ KB
None
```

In [10]:
```
print(iris.to_string())
iris.fillna(120, inplace=True)
print(iris.to_string())
```

```
47            4.6           3.2            1.4           0.2      setosa
48            5.3           3.7            1.5           0.2      setosa
49            5.0           3.3            1.4           0.2      setosa
50            7.0           3.2            4.7           1.4  versicolor
51            6.4           3.2            4.5           1.5  versicolor
52            6.9           3.1            4.9           1.5  versicolor
53            5.5           2.3              4           1.3  versicolor
54            6.5           2.8            4.6           1.5  versicolor
55            5.7           2.8            4.5           1.3  versicolor
56            6.3           3.3            4.7           1.6  versicolor
57            4.9           2.4            3.3           1.0  versicolor
58            6.6           2.9            4.6           1.3  versicolor
59            5.2           2.7            3.9           1.4  versicolor
60            5.0           2.0            3.5           1.0  versicolor
61            5.9           3.0            4.2           1.5  versicolor
62            6.0           2.2              4           1.0  versicolor
63            6.1           2.9            4.7           1.4  versicolor
64            5.6           2.9            3.6           1.3  versicolor
65            6.7           3.1            4.4           1.4  versicolor
```

In [13]:
```
print(iris["sepal_length"].loc[0:5])
```

```
0    5.1
1    4.9
2    4.7
3    4.6
4    5.0
5    5.4
Name: sepal_length, dtype: float64
```

In [21]:

```
---------------------------------------------------------------------------
PermissionError                           Traceback (most recent call last)
<ipython-input-21-e01cc6639319> in <module>
----> 1 iris=pd.read_csv(r"C:\Users\student\Desktop\2018-census-totals-by-topic
-national-highlights-csv")

~\anaconda3\lib\site-packages\pandas\io\parsers.py in read_csv(filepath_or_buff
er, sep, delimiter, header, names, index_col, usecols, squeeze, prefix, mangle_
dupe_cols, dtype, engine, converters, true_values, false_values, skipinitialspa
ce, skiprows, skipfooter, nrows, na_values, keep_default_na, na_filter, verbos
e, skip_blank_lines, parse_dates, infer_datetime_format, keep_date_col, date_pa
rser, dayfirst, cache_dates, iterator, chunksize, compression, thousands, decim
al, lineterminator, quotechar, quoting, doublequote, escapechar, comment, encod
ing, dialect, error_bad_lines, warn_bad_lines, delim_whitespace, low_memory, me
mory_map, float_precision)
    684     )
    685
--> 686     return _read(filepath_or_buffer, kwds)
    687
    688

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _read(filepath_or_buffer,
kwds)
    450
    451     # Create the parser.
--> 452     parser = TextFileReader(fp_or_buf, **kwds)
    453
    454     if chunksize or iterator:

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, f, engine,
**kwds)
    944             self.options["has_index_names"] = kwds["has_index_names"]
    945
--> 946         self._make_engine(self.engine)
    947
    948     def close(self):

~\anaconda3\lib\site-packages\pandas\io\parsers.py in _make_engine(self, engin
e)
   1176     def _make_engine(self, engine="c"):
   1177         if engine == "c":
-> 1178             self._engine = CParserWrapper(self.f, **self.options)
   1179         else:
   1180             if engine == "python":

~\anaconda3\lib\site-packages\pandas\io\parsers.py in __init__(self, src, **kwd
s)
   2006         kwds["usecols"] = self.usecols
   2007
-> 2008         self._reader = parsers.TextReader(src, **kwds)
   2009         self.unnamed_cols = self._reader.unnamed_cols
   2010

pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader.__cinit__()
```

```
pandas\_libs\parsers.pyx in pandas._libs.parsers.TextReader._setup_parser_sourc
e()

PermissionError: [Errno 13] Permission denied: 'C:\\Users\\student\\Desktop\\20
18-census-totals-by-topic-national-highlights-csv'
```

In [20]:

```
          Code Cigarette_smoking_behaviour  \
0            1              Regular smoker
1            2                   Ex-smoker
2            3       Never smoked regularly
3            7      Response unidentifiable
4            9                   Not stated
5  TotalStated                Total stated
6        Total                       Total

   Census_usually_resident_population_count_aged_15_years_and_over
0                                                  498996
1                                                  832104
2                                                 2445252
3                                                       0
4                                                       0
5                                                 3776355
6                                                 3776355
```

In [22]:

```
import pandas as pd
iris=pd.read_csv(r"C:\Users\student\Desktop\iris.csv")
print(iris)
```

```
     sepal_length  sepal_width petal_length  petal_width    species
0             5.1          3.5          1.4          0.2         se
1             4.9          3.0          1.4          0.2     setosa
2             4.7          3.2          1.3          0.2     setosa
3             4.6          3.1          1.5          0.2     setosa
4             5.0          3.6          1.4          0.2     setosa
..            ...          ...          ...          ...        ...
146           6.3          2.5            5          1.9  virginica
147           6.5          3.0          5.2          2.0  virginica
148           6.2          3.4          5.4          2.3  virginica
149           5.9          3.0          5.1          1.8  virginica
150           5.8          3.2          5,2          NaN  virginica

[151 rows x 5 columns]
```

In [27]:
```
print(iris.drop(["sepal_length"],axis=1))
```

```
     sepal_width petal_length  petal_width    species
0            3.5          1.4          0.2         se
1            3.0          1.4          0.2     setosa
2            3.2          1.3          0.2     setosa
3            3.1          1.5          0.2     setosa
4            3.6          1.4          0.2     setosa
..           ...          ...          ...        ...
146          2.5            5          1.9  virginica
147          3.0          5.2          2.0  virginica
148          3.4          5.4          2.3  virginica
149          3.0          5.1          1.8  virginica
150          3.2          5,2          NaN  virginica

[151 rows x 4 columns]
```

In [40]:
```
import pandas as pd
iris=pd.read_csv(r"C:\Users\student\Desktop\rr.csv.csv")
print(iris)
```

```
              Code        Access_to_basic_amenities  \
0               00                     None of these
1               01                Cooking facilities
2               02  Tap water that is safe to drink
3               03                      Kitchen sink
4               04                      Refrigerator
5               05                   Bath or shower
6               06                            Toilet
7               07                Electricity supply
8               77           Response unidentifiable
9               99                       Not stated
10    TotalStated                      Total stated
11  TotalResponses                   Total responses
12           Total                             Total

    Occupied_private_dwellings
0                         5979
1                      1512414
2                      1481133
3                      1513830
4                      1481430
5                      1514472
6                      1515042
7                      1503675
8                         1794
9                       132615
10                     1529901
11                    10527978
12                     1664313
```

In [41]:
```
print(iris.drop(["Code"],axis=1))
```

```
          Access_to_basic_amenities  Occupied_private_dwellings
0                      None of these                        5979
1                 Cooking facilities                     1512414
2   Tap water that is safe to drink                      1481133
3                       Kitchen sink                     1513830
4                       Refrigerator                     1481430
5                    Bath or shower                      1514472
6                            Toilet                     1515042
7                 Electricity supply                     1503675
8            Response unidentifiable                        1794
9                        Not stated                      132615
10                     Total stated                     1529901
11                  Total responses                    10527978
12                            Total                     1664313
```

In [42]:
```
print(iris.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 13 entries, 0 to 12
Data columns (total 3 columns):
 #   Column                      Non-Null Count  Dtype 
---  ------                      --------------  ----- 
 0   Code                        13 non-null     object
 1   Access_to_basic_amenities   13 non-null     object
 2   Occupied_private_dwellings  13 non-null     int64 
dtypes: int64(1), object(2)
memory usage: 440.0+ bytes
None
```

In [ ]:
```

```