```python
import pandas as pd
import matplotlib.pyplot as plt

data = pd.read_csv('World_Population.csv', skiprows=4)
print(data.head(10))
```

```
                  Country Name Country Code      Indicator Name Indicator Code  \
0                        Aruba          ABW  Population, total    SP.POP.TOTL
1    Africa Eastern and Southern    AFE  Population, total    SP.POP.TOTL
2                  Afghanistan          AFG  Population, total    SP.POP.TOTL
3    Africa Western and Central     AFW  Population, total    SP.POP.TOTL
4                       Angola          AGO  Population, total    SP.POP.TOTL
5                       Albania          ALB  Population, total    SP.POP.TOTL
6                       Andorra          AND  Population, total    SP.POP.TOTL
7                    Arab World          ARB  Population, total    SP.POP.TOTL
8           United Arab Emirates        ARE  Population, total    SP.POP.TOTL
9                    Argentina          ARG  Population, total    SP.POP.TOTL

          1960          1961          1962          1963          1964  \
0       54922.0       55578.0       56320.0       57002.0       57619.0
1   130072080.0   133534923.0   137171659.0   140945536.0   144904094.0
2     9035043.0     9214083.0     9404406.0     9604487.0     9814318.0
3    97630925.0    99706674.0   101854756.0   104089175.0   106388440.0
4     5231654.0     5301583.0     5354310.0     5408320.0     5464187.0
5     1608800.0     1659800.0     1711319.0     1762621.0     1814135.0
6        9510.0       10283.0       11086.0       11915.0       12764.0
7    91540853.0    93931683.0    96428599.0    99038509.0   101729760.0
8      131334.0      137989.0      144946.0      152211.0      159692.0
9    20386045.0    20726276.0    21072538.0    21421705.0    21769453.0

          1965  ...          2015          2016          2017          2018  \
0       58190.0  ...      107906.0      108727.0      108735.0      108908.0
1   149033472.0  ...   607123269.0   623369401.0   640058741.0   657801085.0
2    10036008.0  ...    33831764.0    34700612.0    35688935.0    36743039.0
3   108772632.0  ...   418127845.0   429454743.0   440882906.0   452195915.0
4     5521981.0  ...    28157798.0    29183070.0    30234839.0    31297155.0
5     1864791.0  ...     2880703.0     2876101.0     2873457.0     2866376.0
6       13634.0  ...       72174.0       72181.0       73763.0       75162.0
7   104494008.0  ...   410190679.0   419808341.0   428315886.0   435998060.0
8      167103.0  ...     8505237.0     8935095.0     9223225.0     9346701.0
9    22112629.0  ...    43477012.0    43900313.0    44288894.0    44654882.0

          2019          2020          2021          2022          2023  \
0       109203.0      108587.0      107700.0      107310.0      107359.0
1   675950189.0   694446100.0   713090928.0   731821393.0   750503764.0
2    37856121.0    39068979.0    40000412.0    40578842.0    41454761.0
3   463365429.0   474569351.0   485920997.0   497387180.0   509398589.0
4    32375632.0    33451132.0    34532429.0    35635029.0    36749906.0
5     2854191.0     2837849.0     2811666.0     2777689.0     2745972.0
6       76474.0       77380.0       78364.0       79705.0       80856.0
7   444281315.0   453723239.0   460646603.0   471352066.0   481667539.0
8     9445785.0     9401038.0     9575152.0    10074977.0    10483751.0
9    44973465.0    45191965.0    45312281.0    45407904.0    45538401.0

    Unnamed: 68
0           NaN
1           NaN
2           NaN
3           NaN
4           NaN
5           NaN
6           NaN
7           NaN
8           NaN
```

```python
data.drop(columns=['Indicator Name','Indicator Code','Unnamed: 68'],inplace=True)
print(data)
```

```
                  Country Name Country Code          1960          1961  \
0                        Aruba          ABW       54922.0       55578.0
1    Africa Eastern and Southern    AFE   130072080.0   133534923.0
2                  Afghanistan          AFG     9035043.0     9214083.0
3    Africa Western and Central     AFW    97630925.0    99706674.0
4                       Angola          AGO     5231654.0     5301583.0
..                         ...          ...           ...           ...
261                     Kosovo          XKX      984846.0     1011421.0
262                Yemen, Rep.          YEM     5532301.0     5655232.0
263               South Africa          ZAF    16440172.0    16908035.0
264                     Zambia          ZMB     3153729.0     3254086.0
265                   Zimbabwe          ZWE     3809389.0     3930401.0

          1962          1963          1964          1965          1966  \
0       56320.0       57002.0       57619.0       58190.0       58694.0
1   137171659.0   140945536.0   144904094.0   149033472.0   153281203.0
2     9404406.0     9604487.0     9814318.0    10036008.0    10266395.0
3   101854756.0   104089175.0   106388440.0   108772632.0   111246953.0
4     5354310.0     5408320.0     5464187.0     5521981.0     5581386.0
```

```
..      ...        ...        ...        ...        ...
261   1036950.0  1062737.0  1090270.0  1120168.0  1152586.0
262   5782221.0  5911135.0  6048006.0  6195593.0  6351494.0
263  17418522.0 17954564.0 18511361.0 19089380.0 19690087.0
264   3358099.0  3465907.0  3577017.0  3692086.0  3812003.0
265   4055959.0  4185877.0  4320006.0  4458462.0  4601217.0

              1967  ...          2014          2015          2016          2017  \
0          58990.0  ...      106807.0      107906.0      108727.0      108735.0
1      157704381.0  ...   590968990.0   607123269.0   623369401.0   640058741.0
2       10505959.0  ...    32792523.0    33831764.0    34700612.0    35688935.0
3      113795019.0  ...   406992047.0   418127845.0   429454743.0   440882906.0
4        5641807.0  ...    27160769.0    28157798.0    29183070.0    30234839.0
..             ...  ...           ...           ...           ...           ...
261      1187667.0  ...     1812788.0     1788274.0     1777568.0     1791019.0
262      6516444.0  ...    30226309.0    31159379.0    32109010.0    33090921.0
263     20314066.0  ...    55594838.0    56723537.0    57259551.0    57635162.0
264      3936343.0  ...    15895315.0    16399089.0    16914423.0    17441320.0
265      4748307.0  ...    14207359.0    14399013.0    14600294.0    14812482.0

              2018          2019          2020          2021          2022  \
0          108908.0      109203.0      108587.0      107700.0      107310.0
1      657801085.0   675950189.0   694446100.0   713090928.0   731821393.0
2       36743039.0    37856121.0    39068979.0    40000412.0    40578842.0
3      452195915.0   463365429.0   474569351.0   485920997.0   497387180.0
4       31297155.0    32375632.0    33451132.0    34532429.0    35635029.0
..             ...           ...           ...           ...           ...
261      1797086.0     1788891.0     1790152.0     1786080.0     1768096.0
262     34085182.0    35111408.0    36134863.0    37140230.0    38222876.0
263     58613001.0    59587885.0    60562381.0    61502603.0    62378410.0
264     17973569.0    18513839.0    19059395.0    19603607.0    20152938.0
265     15034452.0    15271368.0    15526888.0    15797210.0    16069056.0

              2023
0          107359.0
1      750503764.0
2       41454761.0
3      509398589.0
4       36749996.0
```

```
data = data.dropna()
```

```
year = input("Enter the year to get the population(1960-2023): ")
country = int(input("Enter the No. of countries to be displayed:"))

filtered_data = data.sort_values(by=year, ascending=False).head(country)
print(filtered_data)
```

```
Enter the year to get the population(1960-2023): 2022
Enter the No. of countries to be displayed:20
                                   Country Name Country Code          1960  \
259                                       World          WLD  3.021529e+09
103                            IDA & IBRD total          IBT  2.289188e+09
140                          Low & middle income         LMY  2.106419e+09
156                               Middle income         MIC  1.970293e+09
102                                   IBRD only          IBD  1.893701e+09
62                  Early-demographic dividend          EAR  9.689094e+08
139                         Lower middle income         LMC  8.190472e+08
249                         Upper middle income         UMC  1.151246e+09
63                          East Asia & Pacific         EAS  1.042838e+09
142                  Late-demographic dividend          LTE  1.094880e+09
61   East Asia & Pacific (excluding high income)     EAP  8.959615e+08
230    East Asia & Pacific (IDA & IBRD countries)     TEA  8.842525e+08
204                                  South Asia         SAS  5.626637e+08
240                      South Asia (IDA & IBRD)         TSA  5.626637e+08
104                                   IDA total         IDA  3.954874e+08
109                                       India         IND  4.359903e+08
40                                        China         CHN  6.670700e+08
95                                  High income         HIC  9.069501e+08
181                                OECD members         OED  8.095807e+08
107                                    IDA only         IDX  2.746856e+08

            1961          1962          1963          1964          1965  \
259  3.062769e+09  3.117373e+09  3.184063e+09  3.251253e+09  3.318998e+09
103  2.321079e+09  2.366118e+09  2.423349e+09  2.481068e+09  2.539564e+09
140  2.136241e+09  2.179212e+09  2.234339e+09  2.289932e+09  2.346426e+09
156  1.996885e+09  2.036499e+09  2.088134e+09  2.140062e+09  2.192727e+09
102  1.915613e+09  1.950275e+09  1.996753e+09  2.043310e+09  2.090210e+09
62   9.941768e+08  1.020131e+09  1.046697e+09  1.074021e+09  1.101264e+09
139  8.396491e+08  8.607403e+08  8.823720e+08  9.045288e+08  9.268145e+08
249  1.157236e+09  1.175759e+09  1.205762e+09  1.235533e+09  1.265913e+09
63   1.044750e+09  1.059217e+09  1.085095e+09  1.110651e+09  1.136869e+09
142  1.096959e+09  1.111293e+09  1.137057e+09  1.162405e+09  1.188452e+09
61   8.955346e+08  9.074730e+08  9.308108e+08  9.537835e+08  9.773669e+08
230  8.835582e+08  8.952249e+08  9.182590e+08  9.409095e+08  9.641639e+08
204  5.765523e+08  5.907231e+08  6.051635e+08  6.199757e+08  6.347434e+08
240  5.765523e+08  5.907231e+08  6.051635e+08  6.199757e+08  6.347434e+08
104  4.054661e+08  4.158429e+08  4.265956e+08  4.377586e+08  4.493548e+08
109  4.465647e+08  4.572831e+08  4.681386e+08  4.792296e+08  4.901401e+08
```

```
40     6.603300e+08   6.657700e+08   6.823350e+08   6.983550e+08   7.151850e+08
95     9.180728e+08   9.294044e+08   9.406600e+08   9.519439e+08   9.628735e+08
181    8.207973e+08   8.322283e+08   8.436508e+08   8.551350e+08   8.663009e+08
107    2.815875e+08   2.887505e+08   2.961443e+08   3.038242e+08   3.118049e+08

                 1966           1967    ...           2014           2015   \
259    3.389087e+09   3.459014e+09    ...   7.353911e+09   7.441472e+09
103    2.600930e+09   2.662675e+09    ...   6.201872e+09   6.281303e+09
140    2.406484e+09   2.466748e+09    ...   5.971198e+09   6.050055e+09
156    2.248824e+09   2.304918e+09    ...   5.393612e+09   5.457879e+09
102    2.139609e+09   2.188950e+09    ...   4.630872e+09   4.677114e+09
62     1.128475e+09   1.156817e+09    ...   3.146800e+09   3.190319e+09
139    9.490863e+08   9.719382e+08    ...   2.721462e+09   2.763351e+09
249    1.299738e+09   1.332980e+09    ...   2.672150e+09   2.694528e+09
63     1.166223e+09   1.194632e+09    ...   2.284386e+09   2.300844e+09
142    1.217220e+09   1.245130e+09    ...   2.241185e+09   2.256212e+09
61     1.004271e+09   1.030471e+09    ...   2.040384e+09   2.056051e+09
```

```python
plt.figure(figsize=(10, 6))
bars = plt.barh(filtered_data['Country Name'], filtered_data[year], color='purple')
plt.gca().invert_yaxis()
plt.xlabel(f'Population in {year} (in billions)')
plt.ylabel('Countries')
plt.title(f'Top {country} Countries by Population in {year}')
plt.grid(axis = 'x', alpha = 0.6)

for bar in bars:
    plt.text(bar.get_width(), bar.get_y() + bar.get_height() / 2,
             f'{bar.get_width():.2f}', ha='left', va='center', fontsize=7)
plt.xticks(fontsize=7)
plt.yticks(fontsize=7)
plt.tight_layout()
plt.show()
```


Top 20 Countries by Population in 2022