

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

```
In [ ]: dataset = pd.read_csv('population.csv')
print(dataset)
```

```
In [26]: dataset_cleaned = dataset.dropna()
print(dataset_cleaned)
```

```
      Series Name  Series Code  \
0  Population, total  SP.POP.TOTL
1  Population, total  SP.POP.TOTL
2  Population, total  SP.POP.TOTL
3  Population, total  SP.POP.TOTL
4  Population, total  SP.POP.TOTL
..      ...      ...
261 Population, total  SP.POP.TOTL
262 Population, total  SP.POP.TOTL
263 Population, total  SP.POP.TOTL
264 Population, total  SP.POP.TOTL
265 Population, total  SP.POP.TOTL

      Country Name  Country Code  YR1990  \
0      Afghanistan      AFG      12045660
1      Albania      ALB      3286542
2      Algeria      DZA      25375810
3  American Samoa      ASM      46640
4      Andorra      AND      52597
..      ...      ...
261      Sub-Saharan Africa      SSF      521314712
262 Sub-Saharan Africa (excluding high income)      SSA      521245205
263 Sub-Saharan Africa (IDA & IBRD countries)      TSS      521314712
264      Upper middle income      UMC      2096593239
265      World      WLD      5299246388

      YR2000      YR2015      YR2016      YR2017      YR2018      YR2019  \
0      20130327      33831764      34700612      35688935      36743039      37856121
1      3089027      2880703      2876101      2873457      2866376      2854191
2      30903893      40019529      40850721      41689299      42505035      43294546
3      56855      52878      52245      51586      50908      50209
4      65685      72174      72181      73763      75162      76474
..      ...      ...      ...      ...      ...      ...
261      681125107      1025251114      1052824144      1080941647      1109997000      1139315618
262      681043976      1025157695      1052729467      1080845804      1109900238      1139217993
263      681125107      1025251114      1052824144      1080941647      1109997000      1139315618
264      2370143667      2694528031      2716145902      2738073366      2758643432      2777172392
265      6161884826      7441471721      7528523334      7614113552      7696494848      7776892015

      YR2020      YR2021      YR2022      YR2023  YR2024
0      39068979      40000412      40578842      41454761      ..
1      2837849      2811666      2777689      2745972      ..
2      44042091      44761099      45477389      46164219      ..
3      49761      49225      48342      47521      ..
4      77380      78364      79705      80856      ..
..      ...      ...      ...      ...      ...
261      1169015451      1199011925      1229208573      1259902353      ..
262      1168916989      1198912667      1229088695      1259782580      ..
263      1169015451      1199011925      1229208573      1259902353      ..
264      2792212417      2803460465      2810662434      2816864459      ..
265      7856138790      7921184346      7989981520      8061876001      ..

[266 rows x 16 columns]
```

```
In [27]: dataset_cleaned.head()
```

Out[27]:

| | Series Name | Series Code | Country Name | Country Code | YR1990 | YR2000 | YR2015 | YR2016 | YR2017 | YR2018 | YR2019 | YR2020 | YR2021 | YR2022 | YR2023 | YR2024 |
|---|-------------------|-------------|----------------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| 0 | Population, total | SP.POP.TOTL | Afghanistan | AFG | 12045660 | 20130327 | 33831764 | 34700612 | 35688935 | 36743039 | 37856121 | 39068979 | 40000412 | 40578842 | 41454761 | .. |
| 1 | Population, total | SP.POP.TOTL | Albania | ALB | 3286542 | 3089027 | 2880703 | 2876101 | 2873457 | 2866376 | 2854191 | 2837849 | 2811666 | 2777689 | 2745972 | .. |
| 2 | Population, total | SP.POP.TOTL | Algeria | DZA | 25375810 | 30903893 | 40019529 | 40850721 | 41689299 | 42505035 | 43294546 | 44042091 | 44761099 | 45477389 | 46164219 | .. |
| 3 | Population, total | SP.POP.TOTL | American Samoa | ASM | 46640 | 56855 | 52878 | 52245 | 51586 | 50908 | 50209 | 49761 | 49225 | 48342 | 47521 | .. |
| 4 | Population, total | SP.POP.TOTL | Andorra | AND | 52597 | 65685 | 72174 | 72181 | 73763 | 75162 | 76474 | 77380 | 78364 | 79705 | 80856 | .. |

```
In [28]: dataset_final = dataset_cleaned.drop(['Series Name','Series Code','Country Code'],axis=1)
```

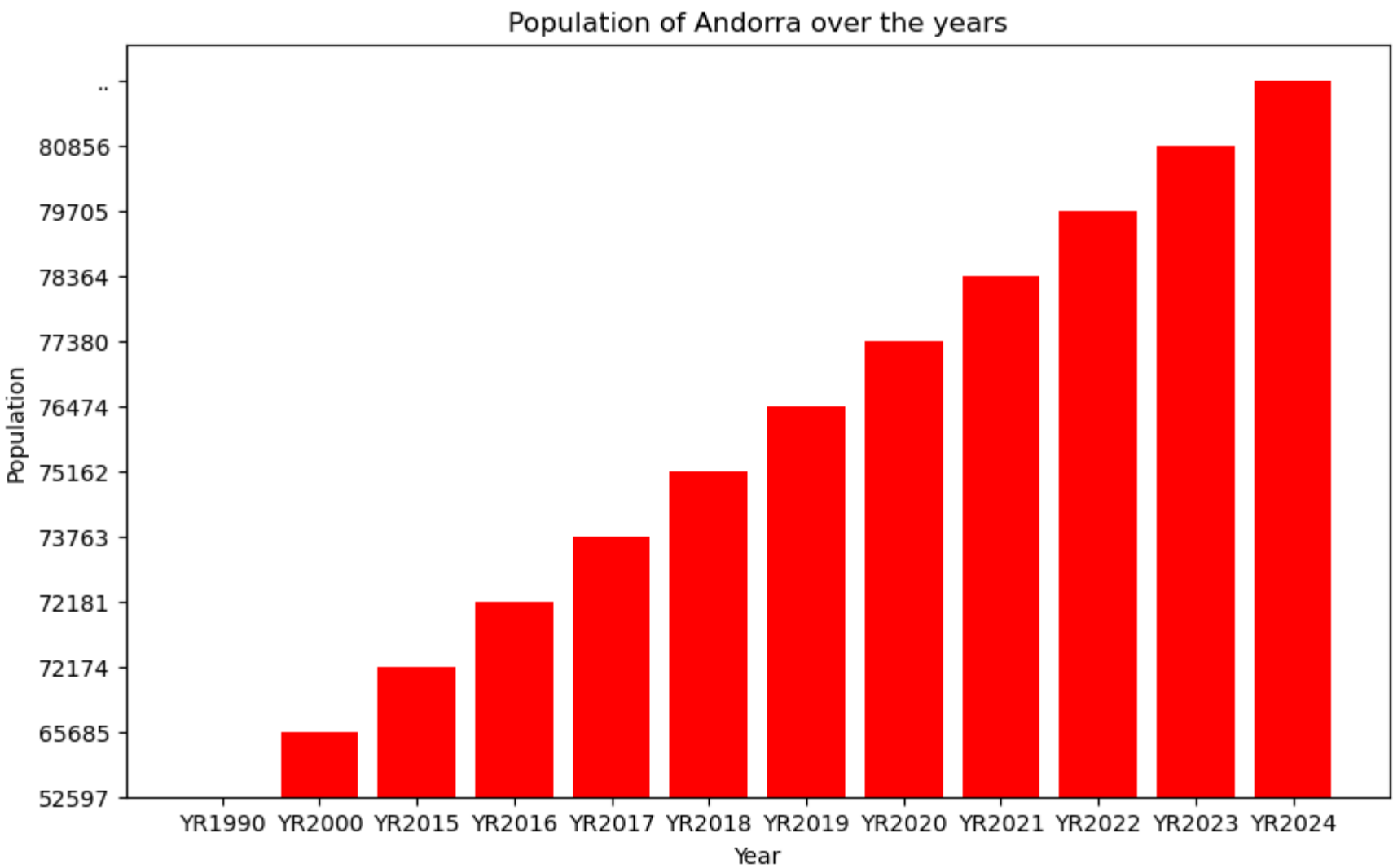
```
In [29]: selected_country = 'Andorra'
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In [30]: country_values = dataset_final[dataset_final['Country Name'] == selected_country]
```

```
In [35]: years = country_values.columns[1:]
```

```
In [36]: population = country_values.iloc[:,1:].values.flatten()
```

```
In [39]: plt.figure(figsize = (10,6))
plt.bar(years, population, color = 'red', align = 'center')
plt.xlabel('Year')
plt.ylabel('Population')
plt.title(f'Population of {selected_country} over the years')
plt.show()
```



```
In [ ]:
```