

```
In [12]: import pandas as pd
import matplotlib.pyplot as plt
import matplotlib.ticker as mticker
import numpy as np
```

```
In [13]: df = pd.read_csv('Data.csv')
```

```
In [14]: x = df['C-2 MARITAL STATUS BY AGE AND SEX '].loc[6:21]
x = np.array(x)
x
```

```
Out[14]: array(['0-9', '10-14', '15-19', '20-24', '25-29', '30-34', '35-39',
'40-44', '45-49', '50-54', '55-59', '60-64', '65-69', '70-74',
'75-79', '80+'], dtype=object)
```

```
In [15]: y = df['Unnamed: 7'].loc[6:21]
y = np.array(y)
y = [int(val) for val in (y)]
y
```

```
Out[15]: [124932540,
69418835,
63982396,
57584693,
51344208,
44660674,
42919381,
37545386,
32138114,
25843266,
19456012,
18701749,
12944326,
9651499,
4490603,
5283695]
```

```
In [16]: z = df['Unnamed: 8'].loc[6:21]
z = np.array(z)
z = [int(val) for val in (z)]
z
```

```
Out[16]: [114802364,
63290377,
56544053,
53839529,
50069757,
43934277,
42221303,
34892726,
30180213,
23225988,
19690043,
18961958,
13510657,
9557343,
4741900,
6005310]
```

```
In [17]: bar_width = 0.4
X_axis = np.arange(len(x))
plt.figure(figsize=(12, 6))
plt.bar(X_axis - bar_width/2, y, bar_width, label='Male', color='royalblue')
plt.bar(X_axis + bar_width/2, z, bar_width, label='Female', color='pink')
plt.xlabel("Age Group")
plt.ylabel("Population")
plt.title("Population Distribution by Age Group in India")
plt.xticks(X_axis, x)
plt.legend()
plt.gca().yaxis.set_major_formatter(mticker.StrMethodFormatter('{x:,.0f}'))
plt.tight_layout()
plt.show()
```

