

```
In [8]: import pandas as pd
import matplotlib.pyplot as plt
```

```
In [9]: data = {
    'Age': [22, 25, 27, 30, 22, 25, 27, 30, 22, 25, 30, 28, 22, 24, 29, 31, 29, 30, 25, 22],
    'Gender': ['Female', 'Male', 'Female', 'Male', 'Female', 'Male', 'Female', 'Male', 'Female', 'Male',
              'Female', 'Male', 'Female', 'Female', 'Male', 'Female', 'Male', 'Female',
              'Female', 'Male', 'Female', 'Male']}
}
```

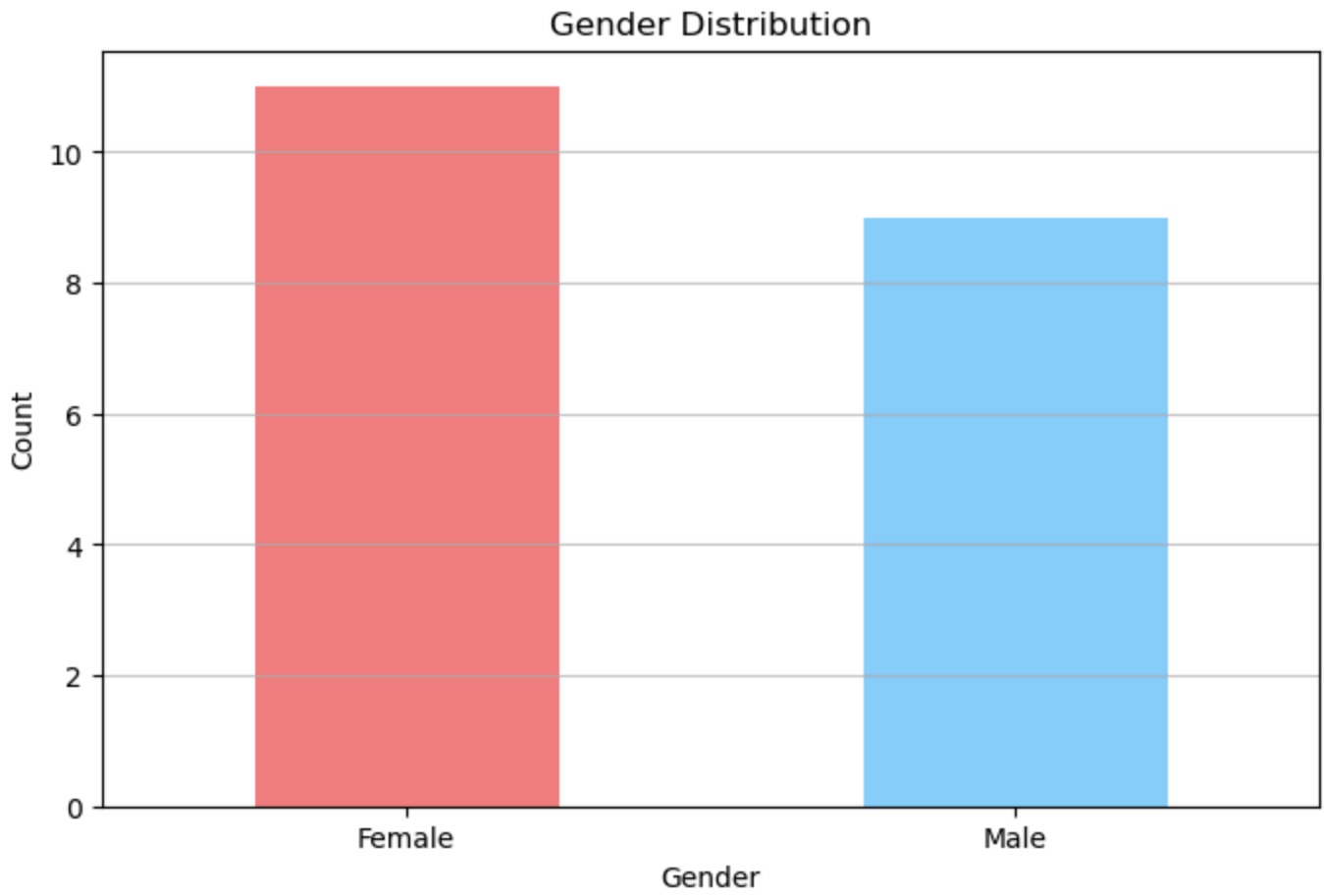
```
In [3]: df
```

Out[3]:

	Age	Gender
0	22	Female
1	25	Male
2	27	Female
3	30	Male
4	22	Female
5	25	Male
6	27	Female
7	30	Male
8	22	Female
9	25	Male
10	30	Female
11	28	Female
12	22	Male
13	24	Female
14	29	Male
15	31	Female
16	29	Female
17	30	Male
18	25	Female
19	22	Male

```
In [4]: # Create a DataFrame
df = pd.DataFrame(data)
```

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In [6]: # Bar Chart for Gender Distribution
gender_counts = df['Gender'].value_counts()
plt.figure(figsize=(8, 5))
gender_counts.plot(kind='bar', color=['lightcoral', 'lightskyblue'])
plt.title('Gender Distribution')
plt.xlabel('Gender')
plt.ylabel('Count')
plt.xticks(rotation=0)
plt.grid(axis='y', alpha=0.75)
plt.show()
```



```
In [7]: # Histogram for Age Distribution
plt.figure(figsize=(10, 5))
plt.hist(df['Age'], bins=10, color='skyblue', edgecolor='black')
plt.title('Age Distribution')
plt.xlabel('Age')
plt.ylabel('Frequency')
plt.grid(axis='y', alpha=0.75)
plt.show()
```

