

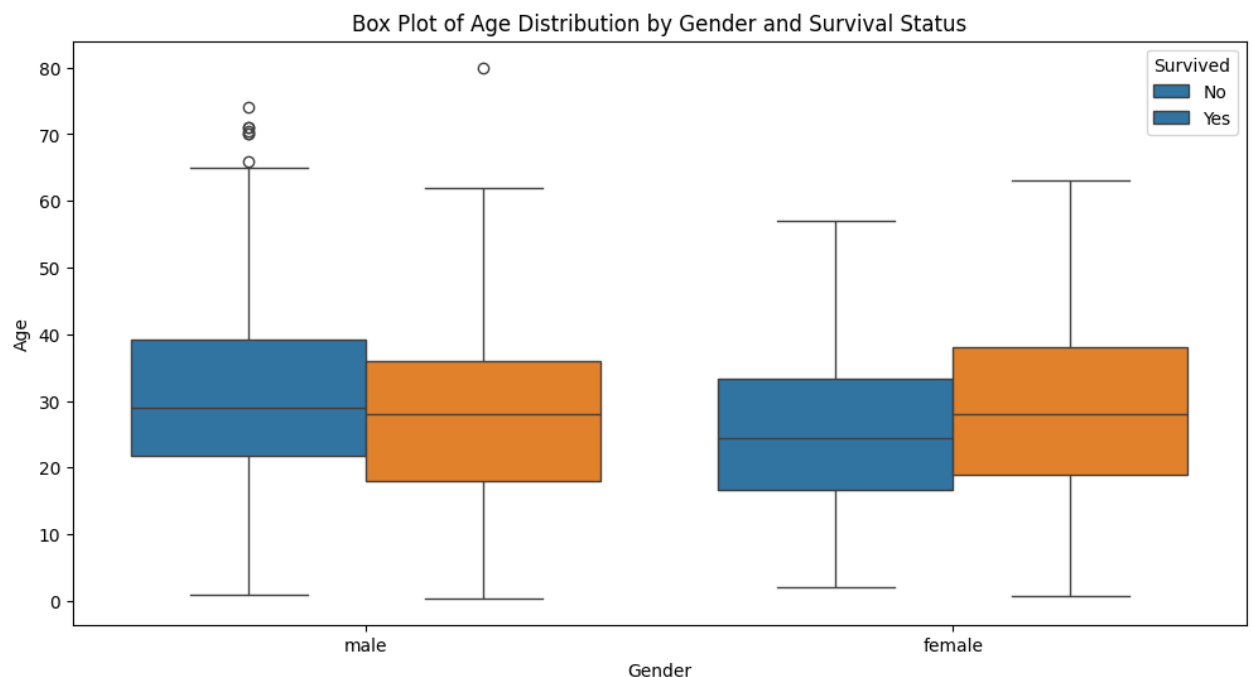
```
In [13]: import seaborn as sns
import matplotlib.pyplot as plt
```

```
In [14]: titanic = sns.load_dataset('titanic')
titanic.head(5)
```

```
Out[14]:
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who
0	0	3	male	22.0	1	0	7.2500	S	Third	man
1	1	1	female	38.0	1	0	71.2833	C	First	woman
2	1	3	female	26.0	0	0	7.9250	S	Third	woman
3	1	1	female	35.0	1	0	53.1000	S	First	woman
4	0	3	male	35.0	0	0	8.0500	S	Third	man

```
In [16]: plt.figure(figsize=(12, 6))
sns.boxplot(x='sex', y='age', hue='survived', data=titanic)
plt.title("Box Plot of Age Distribution by Gender and Survival Status")
plt.xlabel("Gender")
plt.ylabel("Age")
plt.legend(title="Survived", labels=["No", "Yes"])
plt.show()
```



1. Age Distribution: The median age is slightly higher for males than females. The age range is wider for males, meaning more variation in ages.
2. Survival Rate by Age & Gender: Among women, more younger individuals survived, indicated by a higher median age for survivors. Among men, a large

portion of survivors and non-survivors have similar age distributions, showing that survival was less dependent on age for males.

3. Outliers: There are some extreme values in age, particularly among males. A few younger children also appear as outliers, likely due to fewer young passengers. This analysis confirms that women, especially younger ones, had a higher survival rate, likely due to the "women and children first" evacuation policy.

In []: