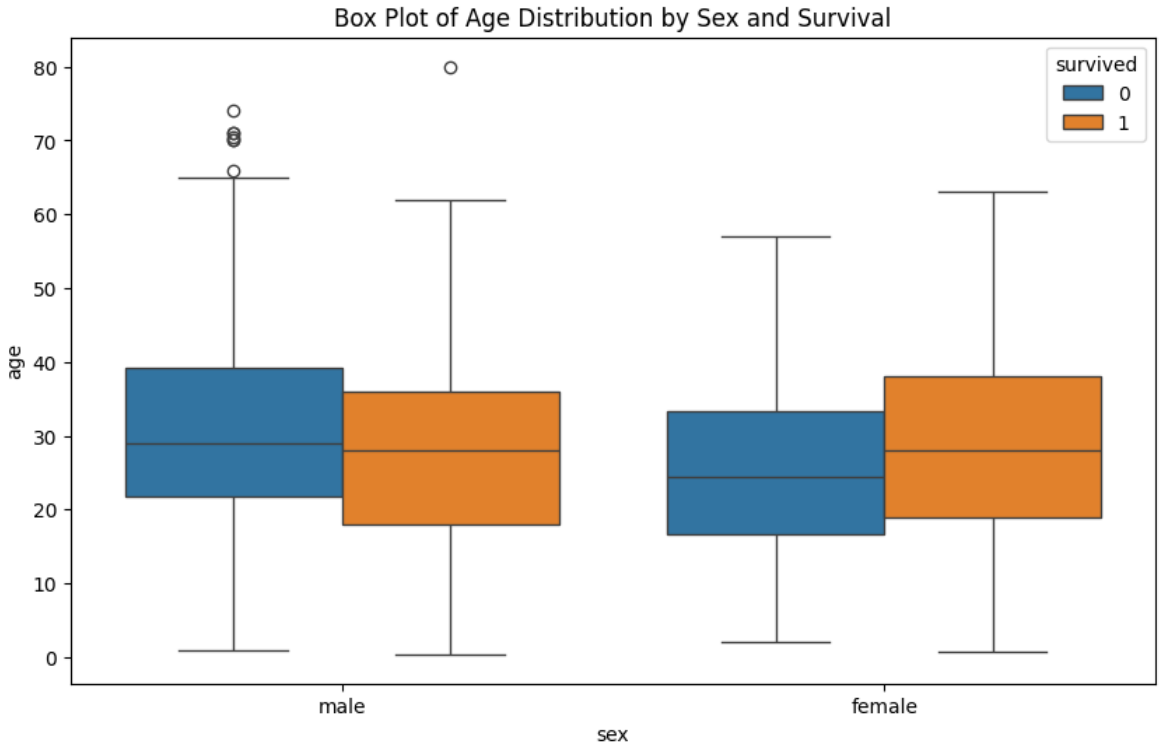
In [ ]:
```python
# 1. Use the inbuilt dataset 'titanic' as used in the above problem. Plot a box
# age  with  respect to each gender along with  the information about whether th
# (Column names : 'sex' and 'age')

# Import necessary libraries
import seaborn as sns
import matplotlib.pyplot as plt

# Load the Titanic dataset
titanic = sns.load_dataset('titanic')

# Display the first few rows of the dataset
print(titanic.head())
```

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

     who  adult_male deck  embark_town alive  alone
0    man        True  NaN  Southampton    no  False
1  woman       False    C    Cherbourg   yes  False
2  woman       False  NaN  Southampton   yes   True
3  woman       False    C  Southampton   yes  False
4    man        True  NaN  Southampton    no   True
```

In [ ]:
```python
# Count the number of survivors and non-survivors for each gender
male_survivors = titanic[(titanic['sex'] == 'male') & (titanic['survived'] == 1)
male_non_survivors = titanic[(titanic['sex'] == 'male') & (titanic['survived'] =
female_survivors = titanic[(titanic['sex'] == 'female') & (titanic['survived'] =
female_non_survivors = titanic[(titanic['sex'] == 'female') & (titanic['survived

print(f"Male survivors: {male_survivors}")
print(f"Male non-survivors: {male_non_survivors}")
print(f"Female survivors: {female_survivors}")
print(f"Female non-survivors: {female_non_survivors}")
```

```
Male survivors: 109
Male non-survivors: 468
Female survivors: 233
Female non-survivors: 81
```

In [ ]:
```python
# Plot a box plot of the 'age' column with respect to 'sex' and 'survived'
plt.figure(figsize=(10,6))  # Set the figure size
sns.boxplot(x='sex', y='age', hue='survived', data=titanic)
plt.title('Box Plot of Age Distribution by Sex and Survival')  # Set the title o
plt.show()
```



2. Observations

1. The median age of survivors and non-survivors is slightly different for both

2. More females are survivors than males

3. There are outliers in male non survivors