

```
In [21]: import numpy as np
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
import warnings
warnings.filterwarnings(action='ignore')
```

```
In [23]: df=pd.read_csv(r"C:\Users\Shree\Downloads\titanic (1).csv")
df
```

Out[23]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599 7
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803 5
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450
...
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536 1
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053 3
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607 2
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369 3
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376

891 rows × 12 columns

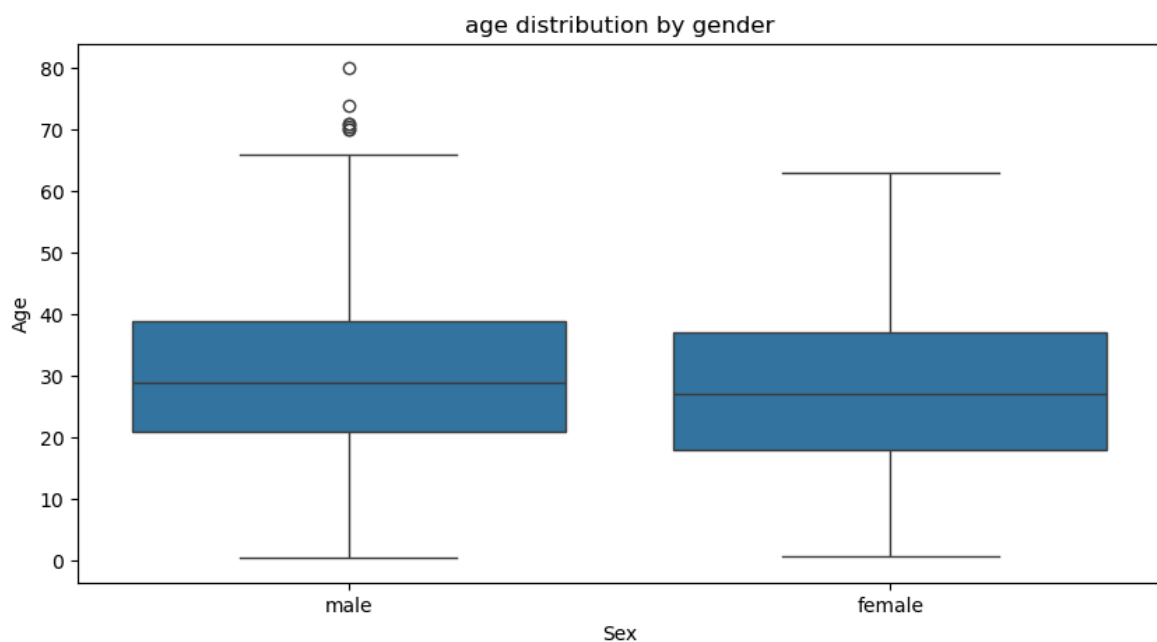
In [25]: `df.drop(['Cabin'],axis=1,inplace=True)`In [27]: `df.isnull().sum()`

```
Out[27]: PassengerId    0
         Survived      0
         Pclass       0
         Name         0
         Sex          0
         Age         177
         SibSp        0
         Parch        0
         Ticket       0
         Fare         0
         Embarked     2
         dtype: int64
```

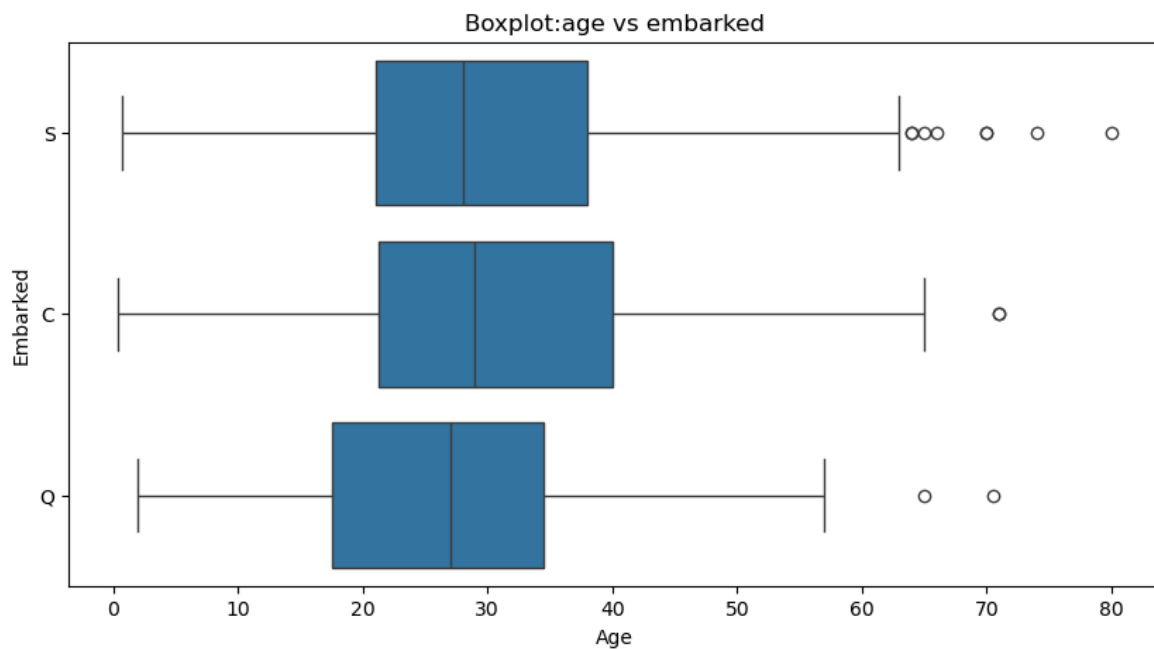
```
In [29]: print(df.columns)
```

```
Index(['PassengerId', 'Survived', 'Pclass', 'Name', 'Sex', 'Age', 'SibSp',
       'Parch', 'Ticket', 'Fare', 'Embarked'],
      dtype='object')
```

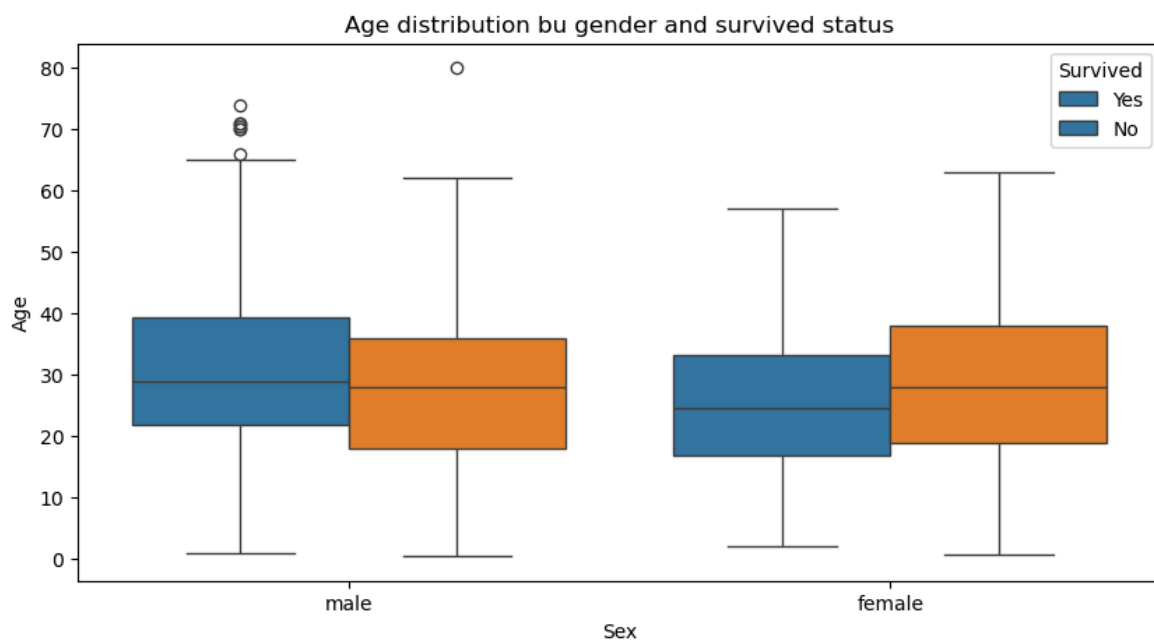
```
In [35]: plt.figure(figsize=(10,5))
         sns.boxplot(data=df,x='Sex',y='Age')
         plt.title('age distribution by gender')
         plt.xlabel('Sex')
         plt.ylabel('Age')
         plt.show()
```



```
In [39]: plt.figure(figsize=(10,5))
         sns.boxplot(data=df,x='Age',y='Embarked')
         plt.title('Boxplot:age vs embarked')
         plt.xlabel('Age')
         plt.ylabel('Embarked')
         plt.show()
```



```
In [53]: plt.figure(figsize=(10,5))
sns.boxplot(data=df,x='Sex',hue='Survived',y='Age')
plt.title('Age distribution bu gender and survived status')
plt.xlabel('Sex')
plt.ylabel('Age')
plt.legend(title='Survived',labels=['Yes', 'No'])
plt.show()
```



```
In [ ]:
```