TASK -1

CREATE A BAR CHART OR HISTOGRAM TO VISUALIZE THE DISTRIBUTION OF CATEGORICAL OR CONTINOUS VARIABLE

In [1]:

```
import pandas as pd
import numpy as np
import seaborn as sns
```

In [5]:

```
#Load the data
df = pd.read_csv("E:\\prodigy\\train.csv")
df
```

Out[5]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fa
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.25
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.28
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.92
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.10
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.05
...	...	...	...	...	...	...	...	...	...	
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.00
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.00
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.45
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.00
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.75

891 rows × 12 columns

In [6]:

```
#Describe the data
df.describe()
```

Out[6]:

	PassengerId	Survived	Pclass	Age	SibSp	Parch	Fare
count	891.000000	891.000000	891.000000	714.000000	891.000000	891.000000	891.000000
mean	446.000000	0.383838	2.308642	29.699118	0.523008	0.381594	32.204208
std	257.353842	0.486592	0.836071	14.526497	1.102743	0.806057	49.693429
min	1.000000	0.000000	1.000000	0.420000	0.000000	0.000000	0.000000
25%	223.500000	0.000000	2.000000	20.125000	0.000000	0.000000	7.910400
50%	446.000000	0.000000	3.000000	28.000000	0.000000	0.000000	14.454200
75%	668.500000	1.000000	3.000000	38.000000	1.000000	0.000000	31.000000
max	891.000000	1.000000	3.000000	80.000000	8.000000	6.000000	512.329200

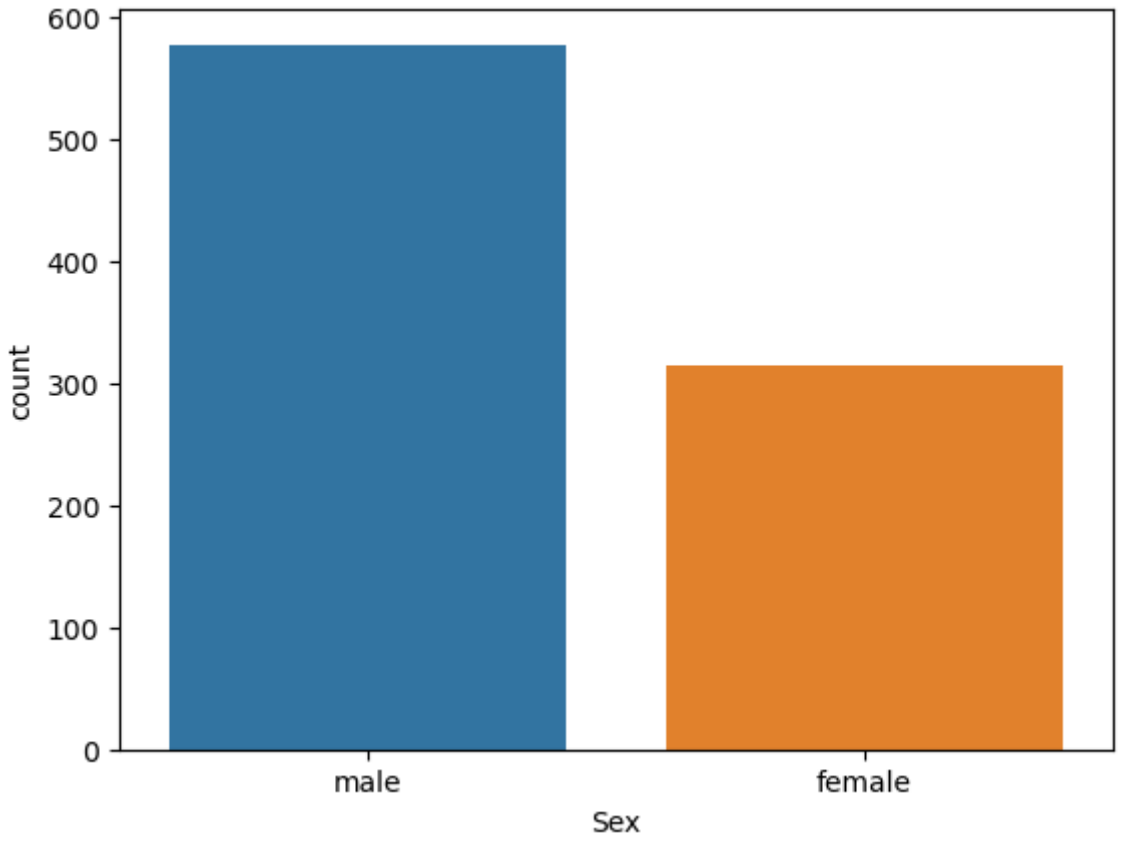
In [7]:

```
#Plot the unique values
sns.countplot(df['Sex']).unique()
```

```
C:\Users\91939\anaconda3\lib\site-packages\seaborn\_decorators.py:36: Futu
reWarning: Pass the following variable as a keyword arg: x. From version
0.12, the only valid positional argument will be `data`, and passing other
arguments without an explicit keyword will result in an error or misinterp
retation.
  warnings.warn(

---------------------------------------------------------------------------
-
AttributeError                            Traceback (most recent call las
t)
~\AppData\Local\Temp\ipykernel_10116\884569769.py in <module>
      1 #Plot the unique values
----> 2 sns.countplot(df['Sex']).unique()

AttributeError: 'AxesSubplot' object has no attribute 'unique'
```



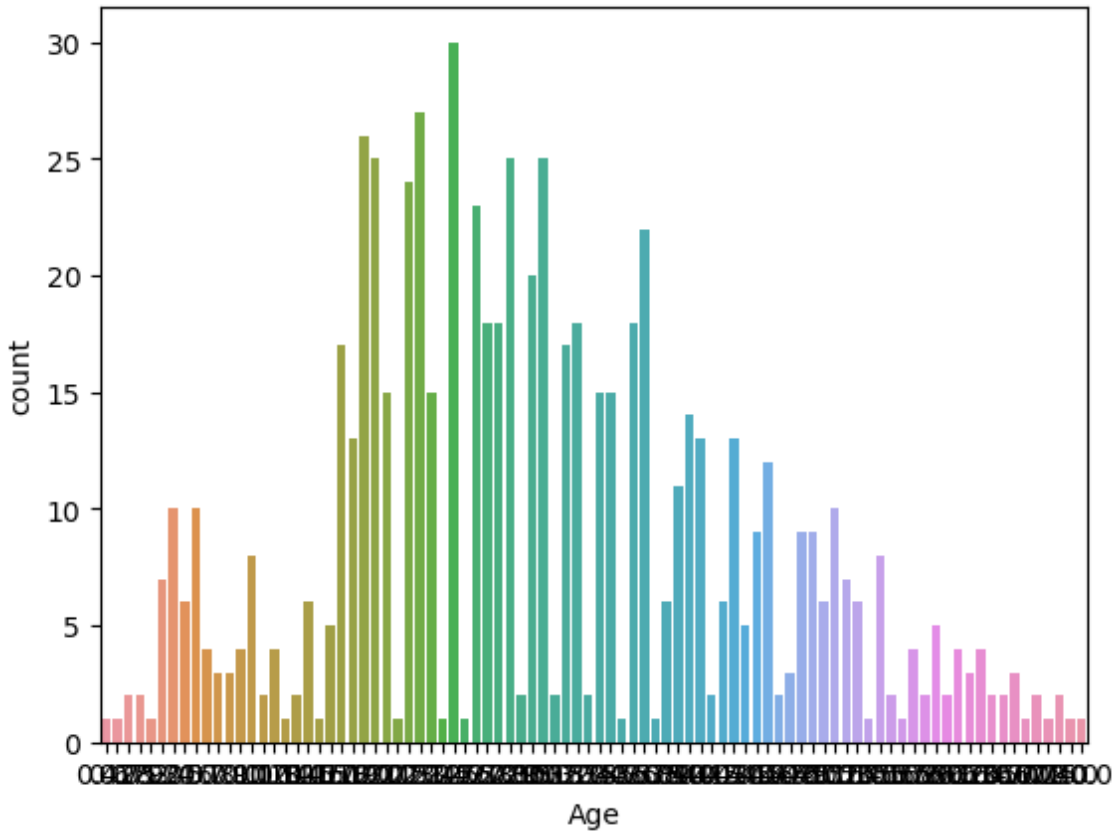
In [8]:

```
#Plot the unique values
sns.countplot(df['Age']).unique()
```

```
C:\Users\91939\anaconda3\lib\site-packages\seaborn\_decorators.py:36: Futu
reWarning: Pass the following variable as a keyword arg: x. From version
0.12, the only valid positional argument will be `data`, and passing other
arguments without an explicit keyword will result in an error or misinterp
retation.
  warnings.warn(

---------------------------------------------------------------------------
-
AttributeError                            Traceback (most recent call las
t)
~\AppData\Local\Temp\ipykernel_10116\772318239.py in <module>
      1 #Plot the unique values
----> 2 sns.countplot(df['Age']).unique()

AttributeError: 'AxesSubplot' object has no attribute 'unique'
```

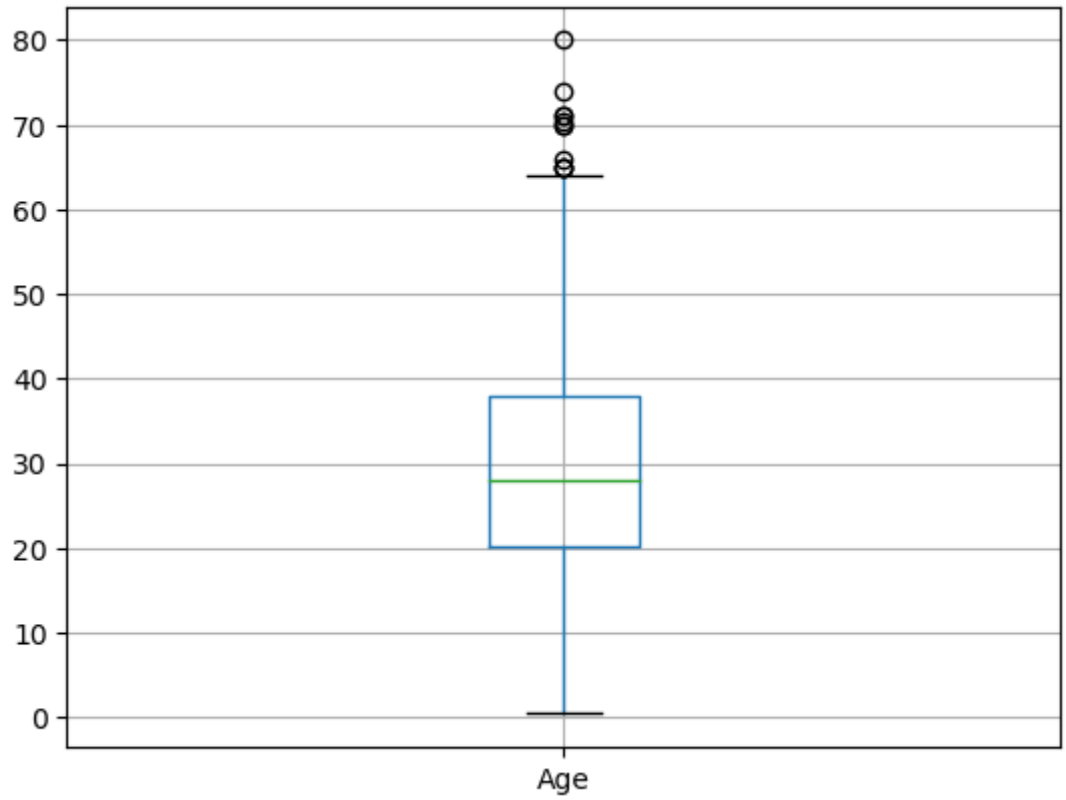


In [9]:

```
#Boxplot
df[['Age']].boxplot()
```

Out[9]:

<AxesSubplot:>

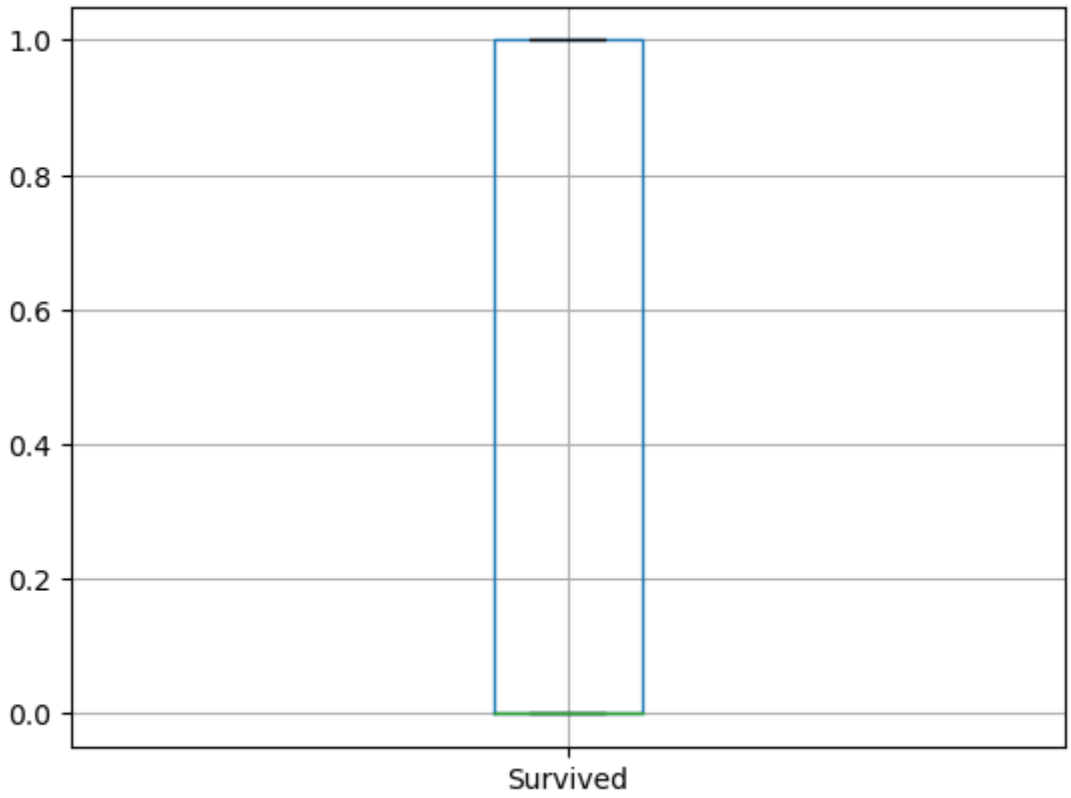


In [10]:

```
#Boxplot
df[['Survived']].boxplot()
```

Out[10]:

```
<AxesSubplot:>
```



In [ ]: