

```
In [ ]: #9. Data Visualization I
#1. Use the inbuilt dataset 'titanic'. The dataset contains 891 rows and contains
#boarded the unfortunate Titanic ship. Use the Seaborn Library to see if we can
#2. Write a code to check how the price of the ticket (column name: 'fare') for each
#passenger is distributed by plotting a histogram.

#no dataset
```

```
In [1]: import pandas as pd
import numpy as np

import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: dataset = sns.load_dataset('titanic')
dataset.head()
```

```
Out[2]:
```

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

```
In [3]: #Step 3: Plotting different graphs
```

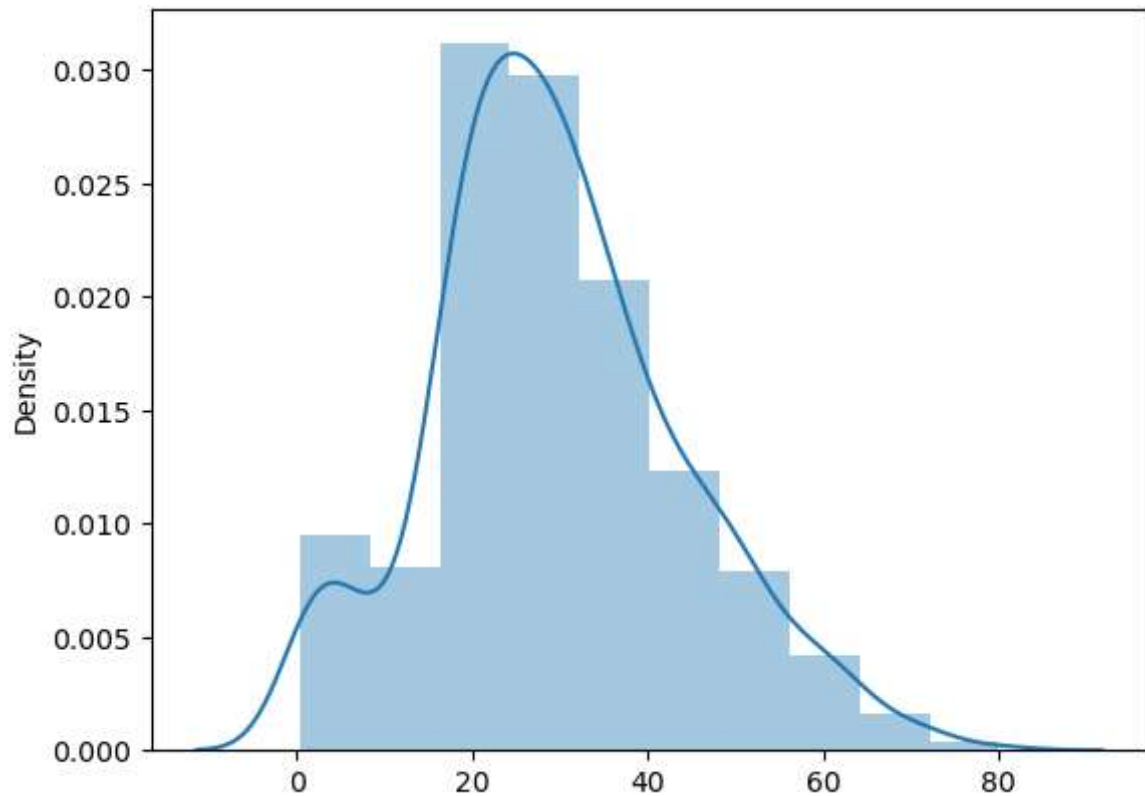
```
In [4]: #Distplot
```

```
In [5]: sns.distplot(x = dataset["age"], bins = 10)
```

C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2619: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

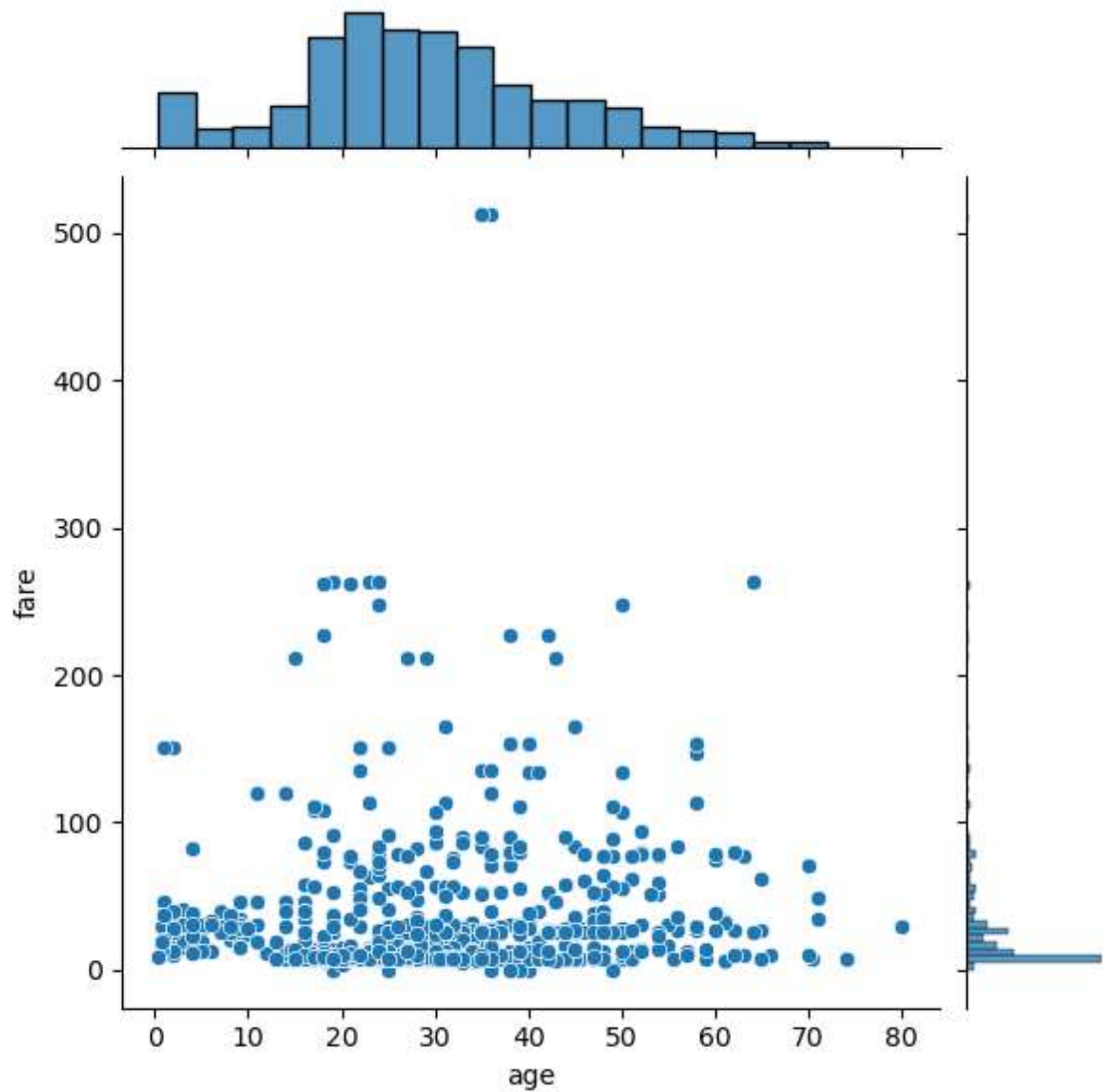
```
warnings.warn(msg, FutureWarning)
```

```
Out[5]: <AxesSubplot:ylabel='Density'>
```



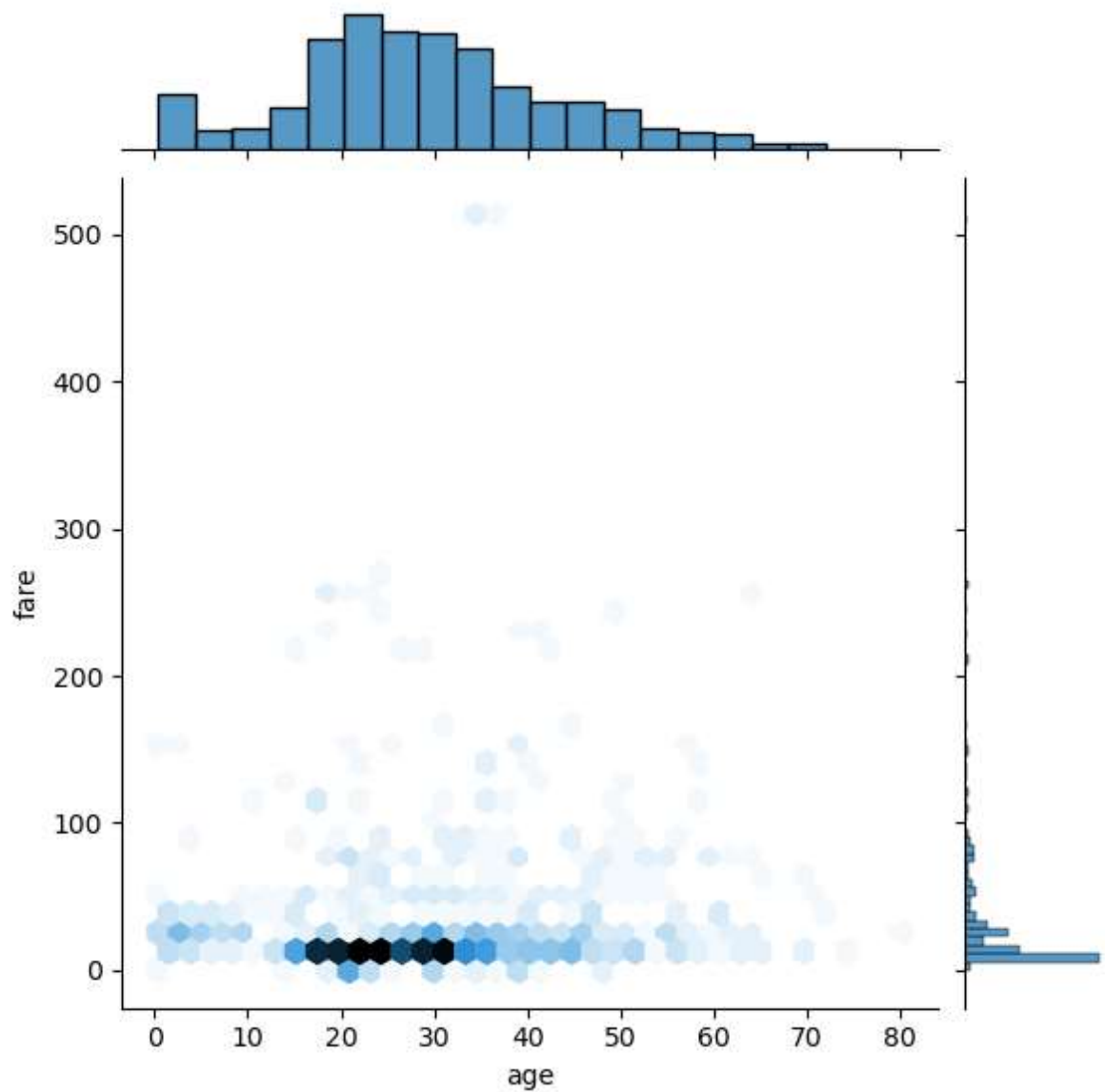
```
In [6]: sns.jointplot(x=dataset["age"],y=dataset["fare"],  
                    kind="scatter")
```

```
Out[6]: <seaborn.axisgrid.JointGrid at 0x1faf30ddf40>
```



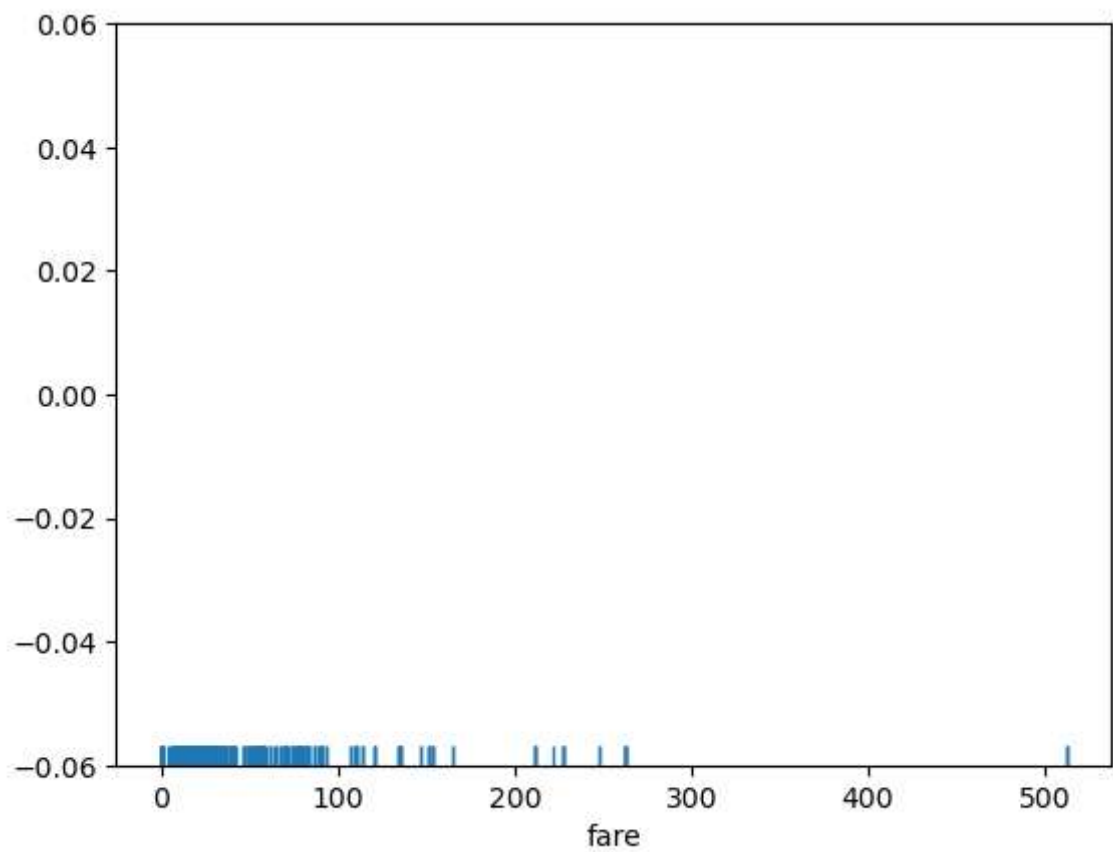
```
In [8]: sns.jointplot(x = dataset["age"],  
                     y = dataset["fare"], kind = "hex")
```

Out[8]: <seaborn.axisgrid.JointGrid at 0x1faf31cda90>



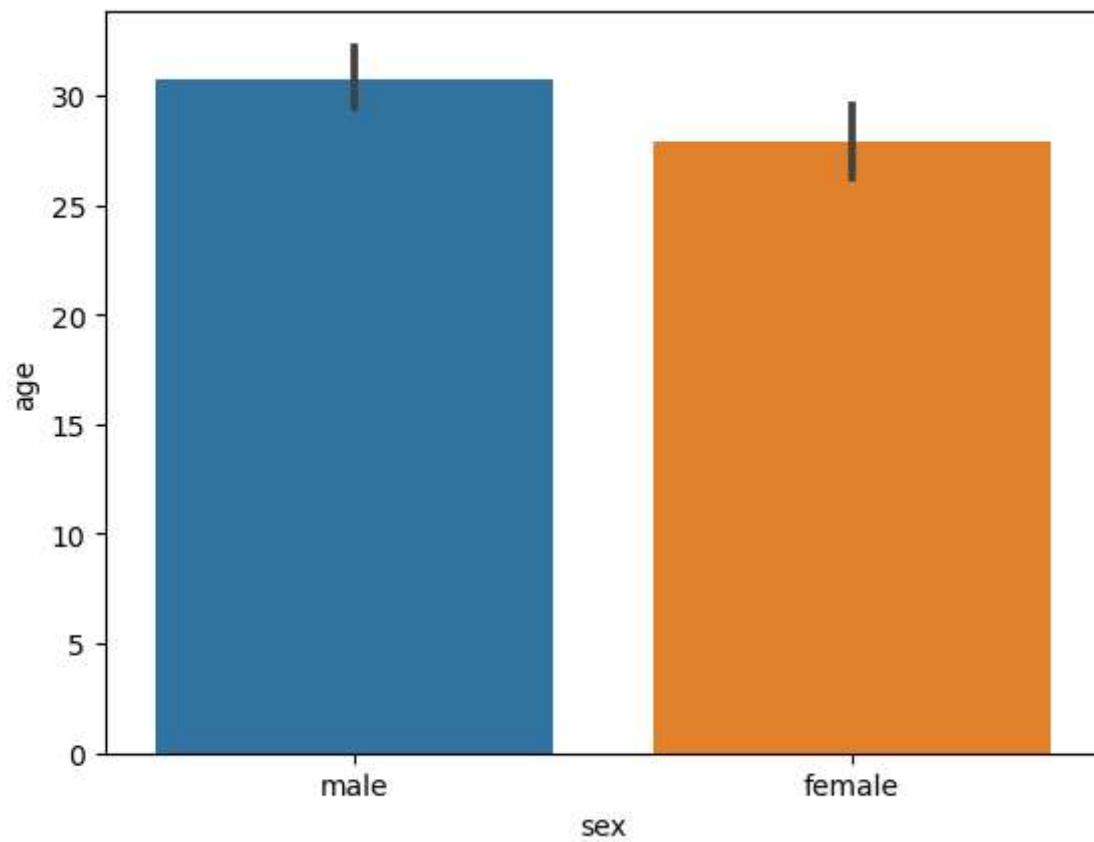
```
In [9]: sns.rugplot(dataset["fare"])
```

```
Out[9]: <AxesSubplot:xlabel='fare'>
```



```
In [10]: sns.barplot(x="sex", y="age", data=dataset)
```

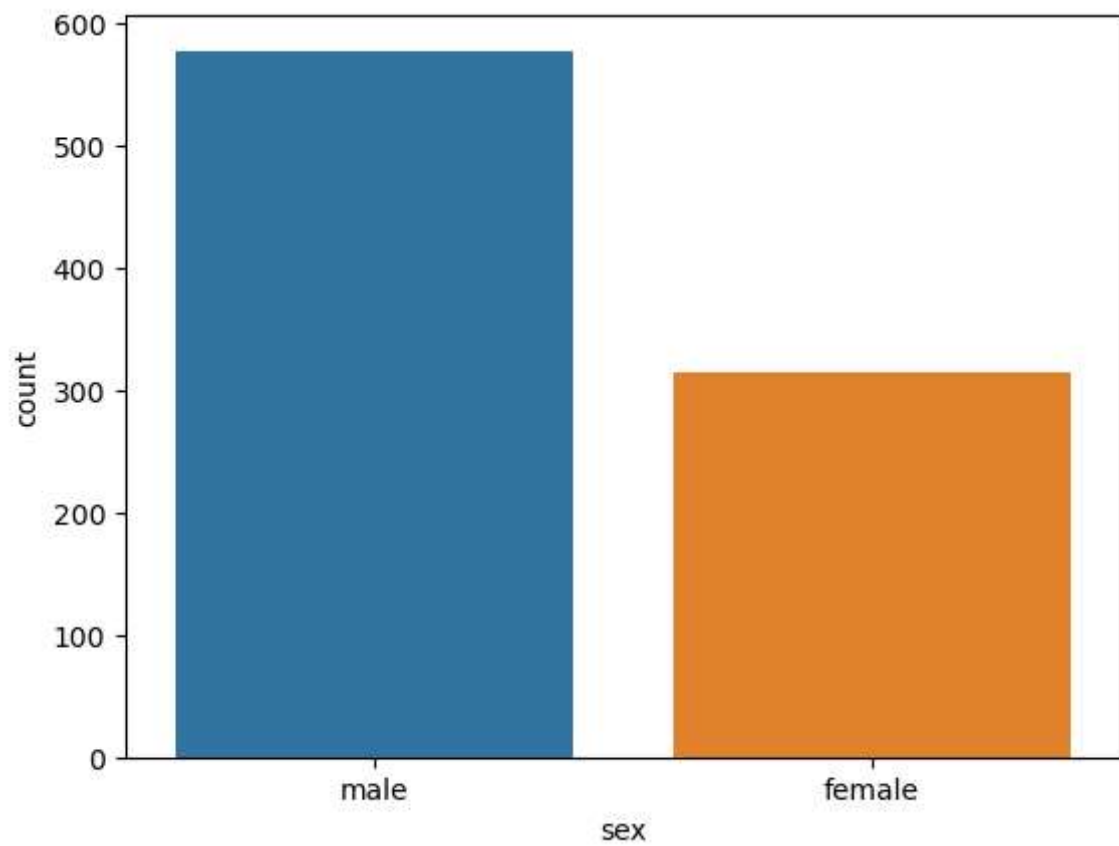
```
Out[10]: <AxesSubplot:xlabel='sex', ylabel='age'>
```



```
In [11]: #Count Plot
```

```
In [12]: sns.countplot(x="sex", data=dataset)
```

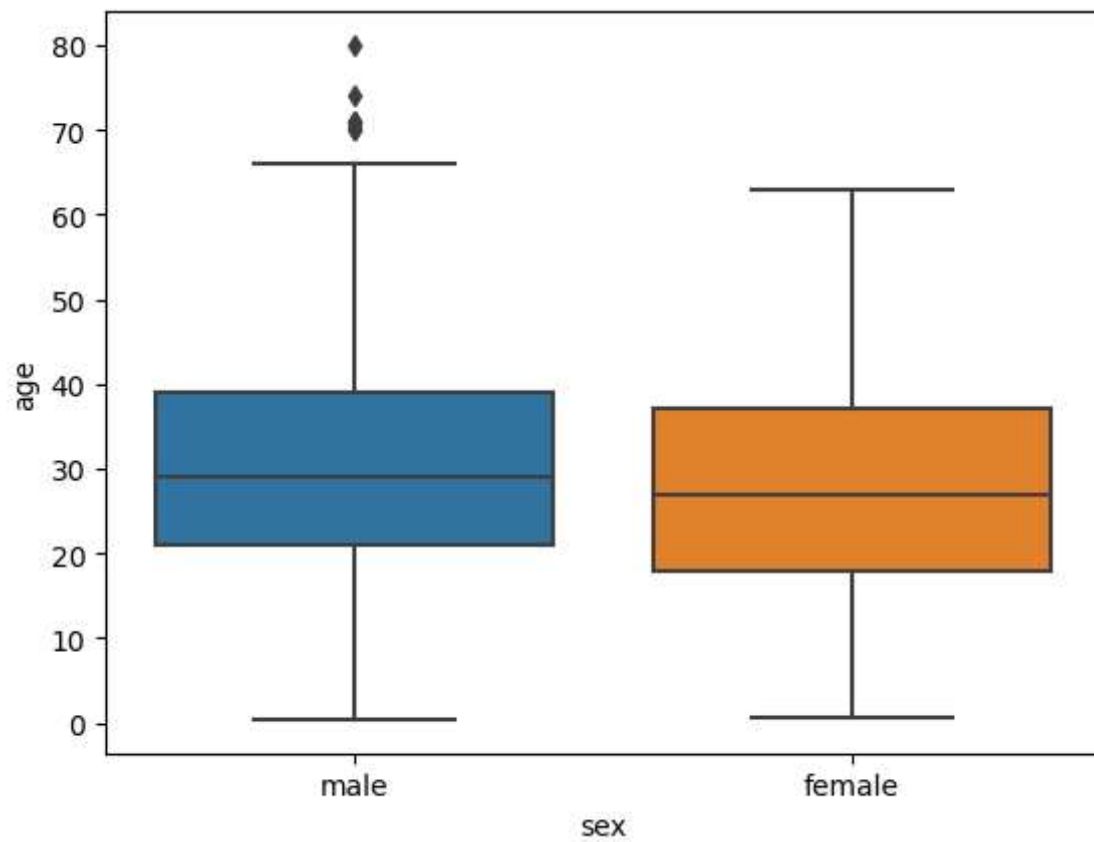
```
Out[12]: <AxesSubplot:xlabel='sex', ylabel='count'>
```



```
In [13]: #Box Plot
```

```
In [14]: sns.boxplot(x="sex", y="age", data=dataset)
```

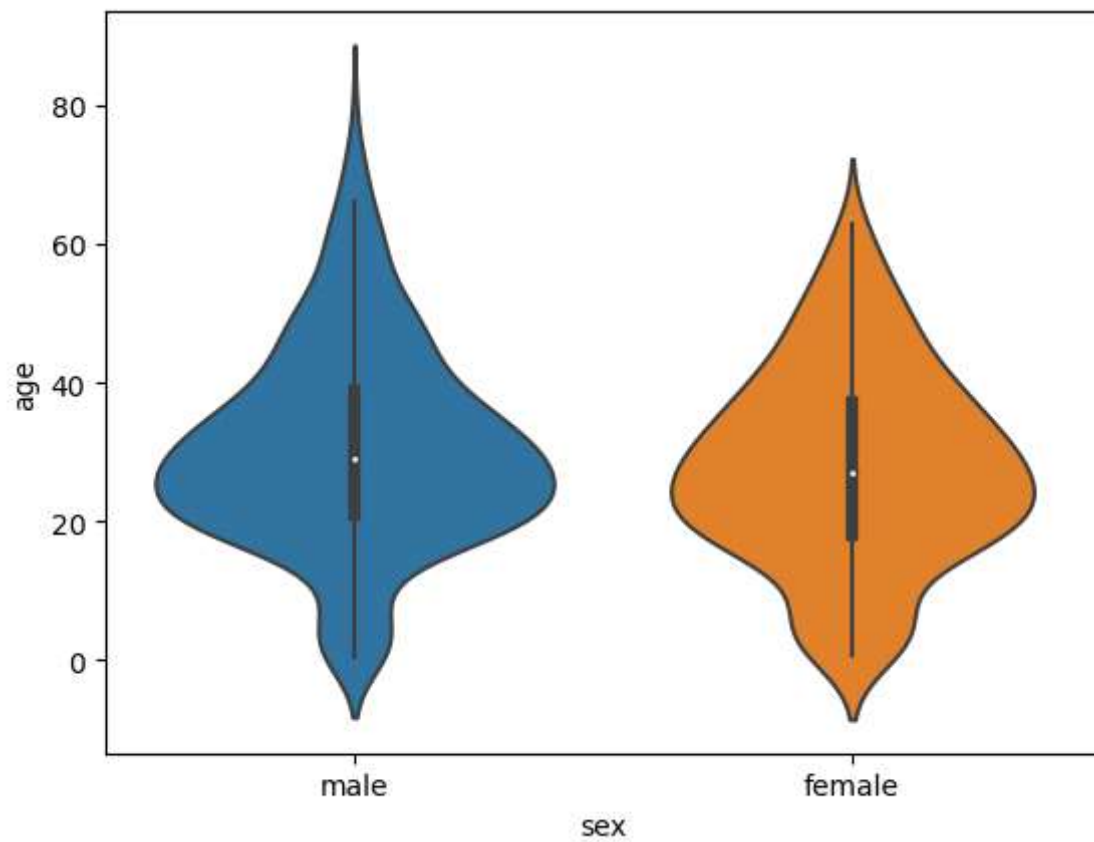
```
Out[14]: <AxesSubplot:xlabel='sex', ylabel='age'>
```





```
In [15]: sns.violinplot(x="sex", y="age", data=dataset)
```

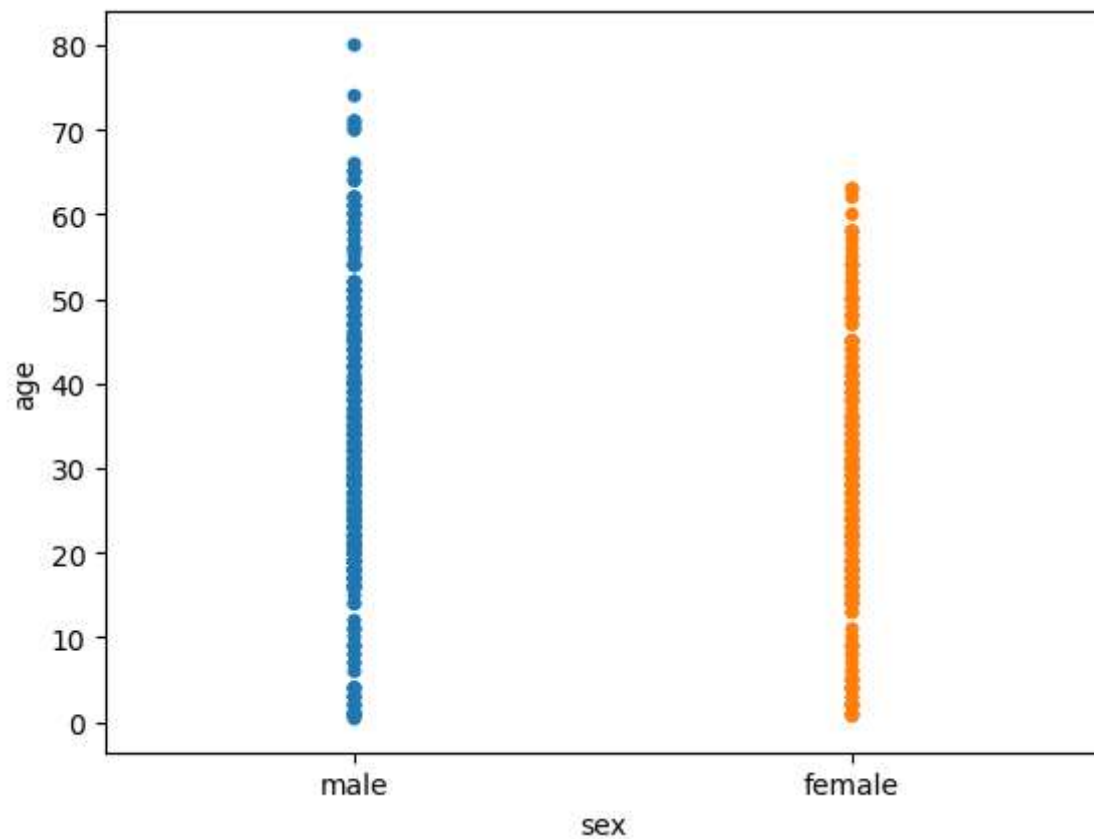
```
Out[15]: <AxesSubplot:xlabel='sex', ylabel='age'>
```



```
In [16]: #Strip Plot
```

```
In [17]: sns.stripplot(x="sex", y="age", data=dataset,  
                      jitter=False)
```

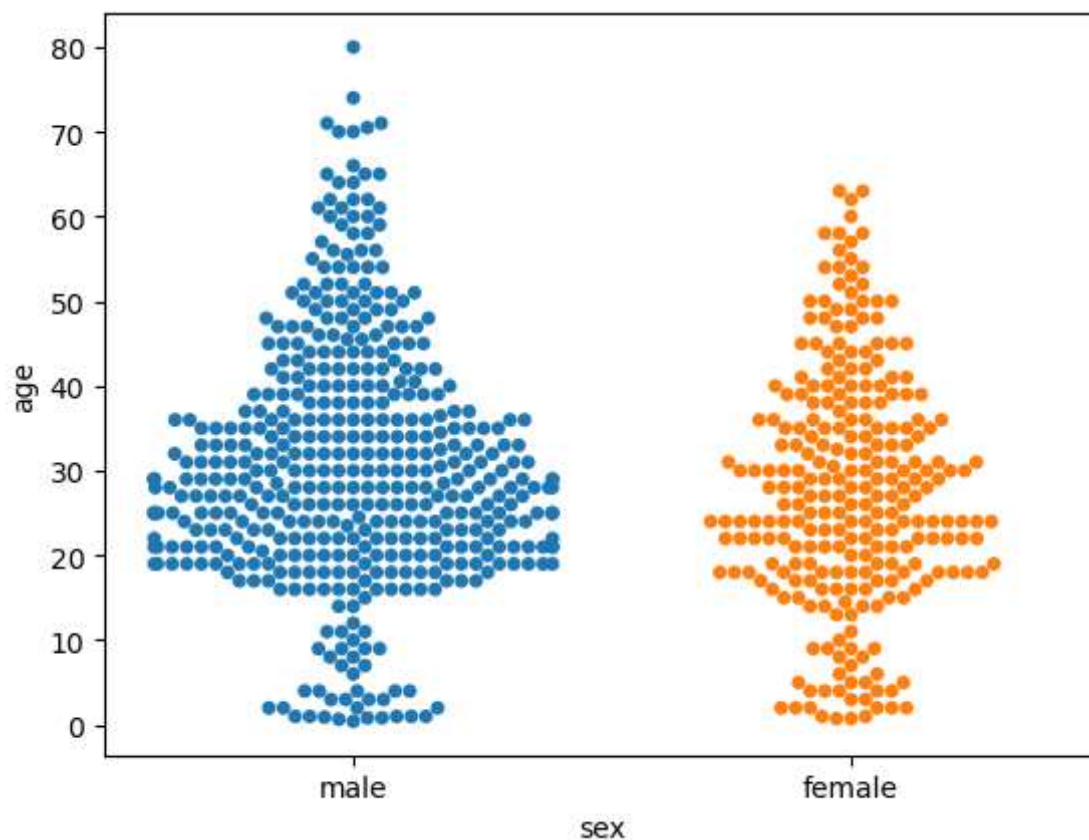
```
Out[17]: <AxesSubplot:xlabel='sex', ylabel='age'>
```



```
In [18]: #Swarm Plot
```

```
In [19]: sns.swarmplot(x="sex", y="age", data=dataset)
```

```
Out[19]: <AxesSubplot:xlabel='sex', ylabel='age'>
```



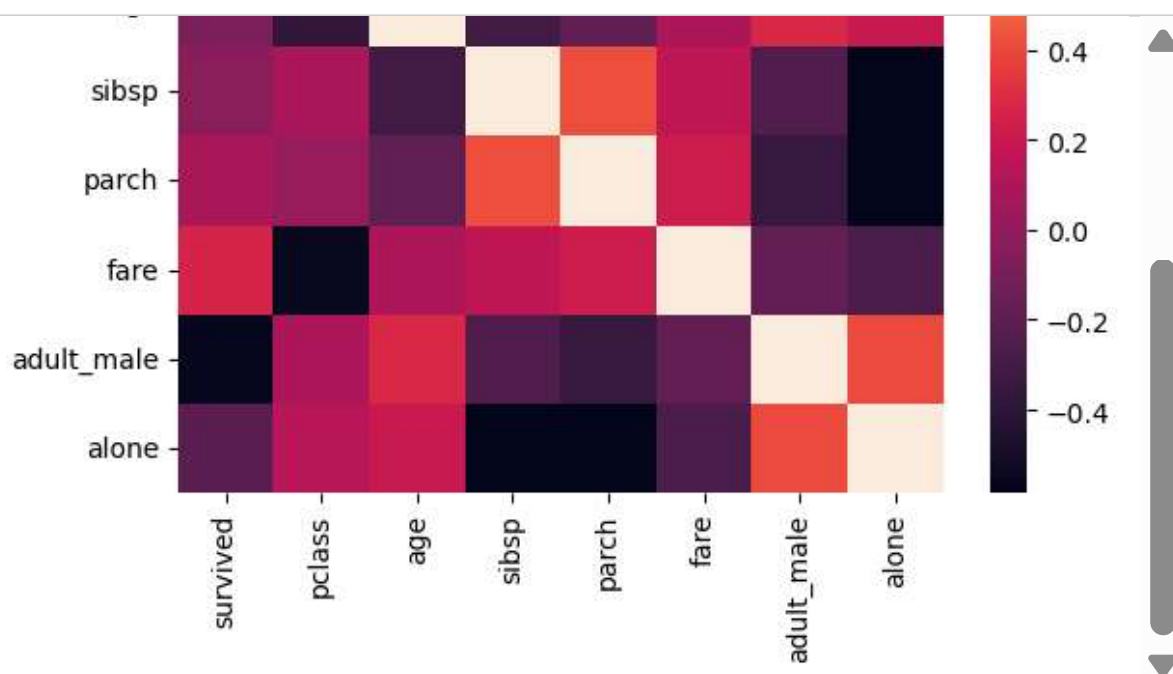
```
In [20]: #Heat Maps
```

```
In [21]: dataset = sns.load_dataset("titanic")
dataset.head()
```

```
Out[21]:
```

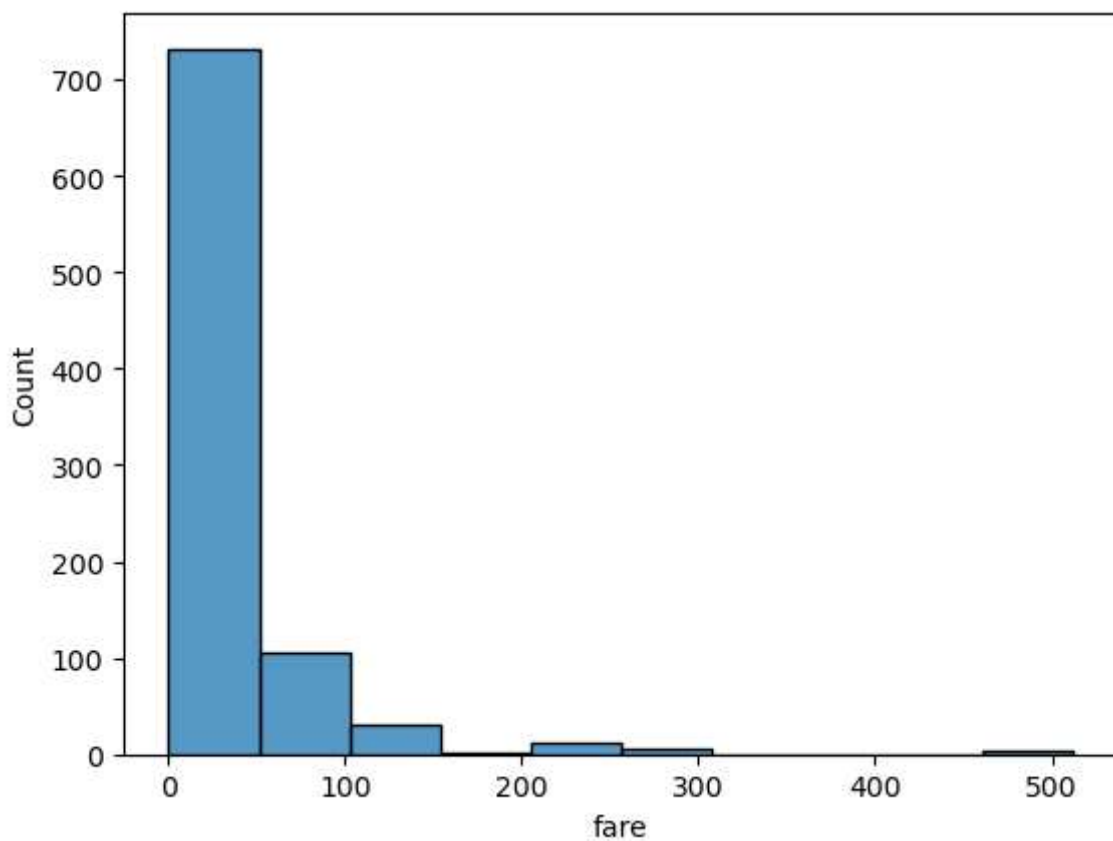
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True
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3	1	1	female	35.0	1	0	53.1000	S	First	woman	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True

```
In [22]: corr = dataset.corr()  
sns.heatmap(corr)
```



```
In [23]: sns.histplot(dataset["fare"],  
                      kde=False, bins=10)
```

Out[23]: <AxesSubplot:xlabel='fare', ylabel='Count'>



In [ ]: