# In [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

## In [2]:

```
df= sns.load_dataset('titanic')
```

## In [3]:

df.head()

## Out[3]:

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

#### In [39]:

```
//distribution plot
sns.distplot(x=df['age'],bins=10)
sns.jointplot(x=df['age'],y=df['fare'],kind='scatter')
sns.jointplot(x=df['age'],y=df['fare'],kind='hex')
sns.rugplot(df['fare'])
//categorical plot
sns.barplot(x='sex',y='age',data=df)
sns.barplot(x='sex',y='age',data=df,estimator=np.std)
sns.countplot(x='sex',data=df)
sns.boxplot(x='sex',y='age',data=df)
sns.boxplot(x='sex',y='age',data=df,hue="survived")
sns.violinplot(x='sex',y='age',data=df)
sns.violinplot(x='sex',y='age',data=df,hue='survived')
//advanced plot
sns.stripplot(x='sex',y='age',data=df,jitter=False)
sns.stripplot(x='sex',y='age',data=df,jitter=True)
sns.stripplot(x='sex',y='age',data=df,jitter=True,hue='survived')
sns.swarmplot(x='sex',y='age',data=df,hue='survived')
df.corr()
corr=df.corr()
//matrixplot
sns.heatmap(corr,annot=True)
sns.histplot(df['fare'],kde=False,bins=10)
C:\Users\hp\AppData\Local\Temp\ipykernel_9516\3301238941.py:1: UserWarn
ing:
`distplot` is a deprecated function and will be removed in seaborn v0.1
4.0.
Please adapt your code to use either `displot` (a figure-level function
similar flexibility) or `histplot` (an axes-level function for histogra
ms).
For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751 (http
s://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751)
  sns.distplot(x=df['age'],bins=10)
C:\Users\hp\anaconda3\lib\site-packages\numpy\lib\nanfunctions.py:1559:
RuntimeWarning: All-NaN slice encountered
```

r, k = function\_base.\_ureduce(a,

### In [40]:

```
import matplotlib.pyplot as plt

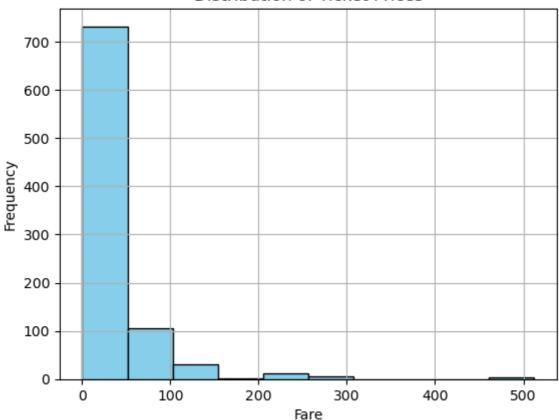
# Assuming you have a DataFrame called 'passengers' with a column named 'fare'
fare_values = df['fare']

plt.hist(fare_values, bins=10, color='skyblue', edgecolor='black')

plt.xlabel('Fare')
plt.ylabel('Frequency')
plt.title('Distribution of Ticket Prices')
plt.grid(True)

plt.show()
```

### Distribution of Ticket Prices



### In [ ]: