

## Lab Assignment-8

use inbuilt dataset of titanic write a code to check price of each passenger is distributed by plotting histogram

#The seaborn library can be downloaded in a couple of ways. If you are using pip installer for Python libraries, you can execute the following command to download the library:  
pip install seaborn

```
import pandas as pd
import numpy as np
```

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

#All you have to do is use the load\_dataset function and pass it the name of the dataset.

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

```
dataset.head()
```

survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who			
	adult_male	deck	embark_town	alive	alone							
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN
	Southampton	no	False									
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	
	C	Cherbourg	yes	False								
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN
	Southampton	yes	True									
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	
	C	Southampton	yes	False								
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN
	Southampton	no	True									

The Dist Plot The distplot() shows the histogram distribution of data for a single column. The column name is passed as a parameter to the distplot() function

```
sns.distplot(dataset['fare'])
```

```
sns.distplot(dataset['fare'], kde=False)
```

#You can also pass the value for the bins parameter in order to see more or less details in the graph.

Take a look at the following script:

```
sns.jointplot(x='age', y='fare', data=dataset)
```

```
sns.distplot(dataset['fare'], kde=False, bins=10)
```

```
sns.jointplot(x='age', y='fare', data=dataset, kind='hex')
```

#The Pair Plot The pairplot() is a type of distribution plot that basically plots a joint plot for all the possible combination of numeric and Boolean columns in your dataset. You only need to pass the name of your dataset as the parameter to the pairplot() function as shown below:

```
dataset = dataset.dropna()
sns.pairplot(dataset, hue='sex')
```

#The rugplot() is used to draw small bars along x-axis for each point in the dataset. To plot a rug plot, you need to pass the name of the column. Let's plot a rug plot for fare.

```
sns.rugplot(dataset['fare'])
```

### Conclusion

Seaborn is an advanced data visualization library built on top of Matplotlib library. In this Lab Assignment, we looked at how we can draw distributional and categorical plots using Seaborn library