In [7]: import pandas as pd import numpy as np import seaborn as sns import matplotlib.pyplot as plt #Loading dataset data = pd.read\_csv('https://raw.githubusercontent.com/dphi-official/Datasets/master/titanic\_data.csv' In [8]: data.head() Out[8]:

Out	[ Q ]	١.

	Passengerld	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th	female	38.0	1	0	PC 17599	71.2833	C85	С
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	NaN	S
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123	S
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN	S

In [9]: data.describe()

## Out[9]:

	Passengerld	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 [10]: data.info()

<class 'pandas.core.frame.DataFrame'> RangeIndex: 891 entries, 0 to 890 Data columns (total 12 columns):

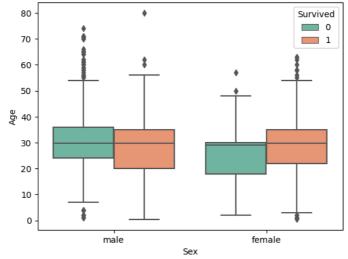
#	Column	Non-Null Count	Dtype		
0	PassengerId	891 non-null	int64		
1	Survived	891 non-null	int64		
2	Pclass	891 non-null	int64		
3	Name	891 non-null	object		
4	Sex	891 non-null	object		
5	Age	714 non-null	float64		
6	SibSp	891 non-null	int64		
7	Parch	891 non-null	int64		
8	Ticket	891 non-null	object		
9	Fare	891 non-null	float64		
10	Cabin	204 non-null	object		
11	Embarked	889 non-null	object		
ltynes: float64(2), int64(5), object(5)					

dtypes: float64(2), int64(5), object(5)

memory usage: 83.7+ KB

```
In [11]: data['Age'] = data['Age'].fillna(np.mean(data['Age']))
data['Cabin'] = data['Cabin'].fillna(data['Cabin'].mode()[0])
data['Embarked'] = data['Embarked'].fillna(data['Embarked'].mode()[0])
```

Plot for distribution of age with respect to each gender along with the information about whether they survived or not



In [ ]: