

#Importing All Required Libraries

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

from warnings import filterwarnings
filterwarnings(action='ignore')
```

#Loading Datasets

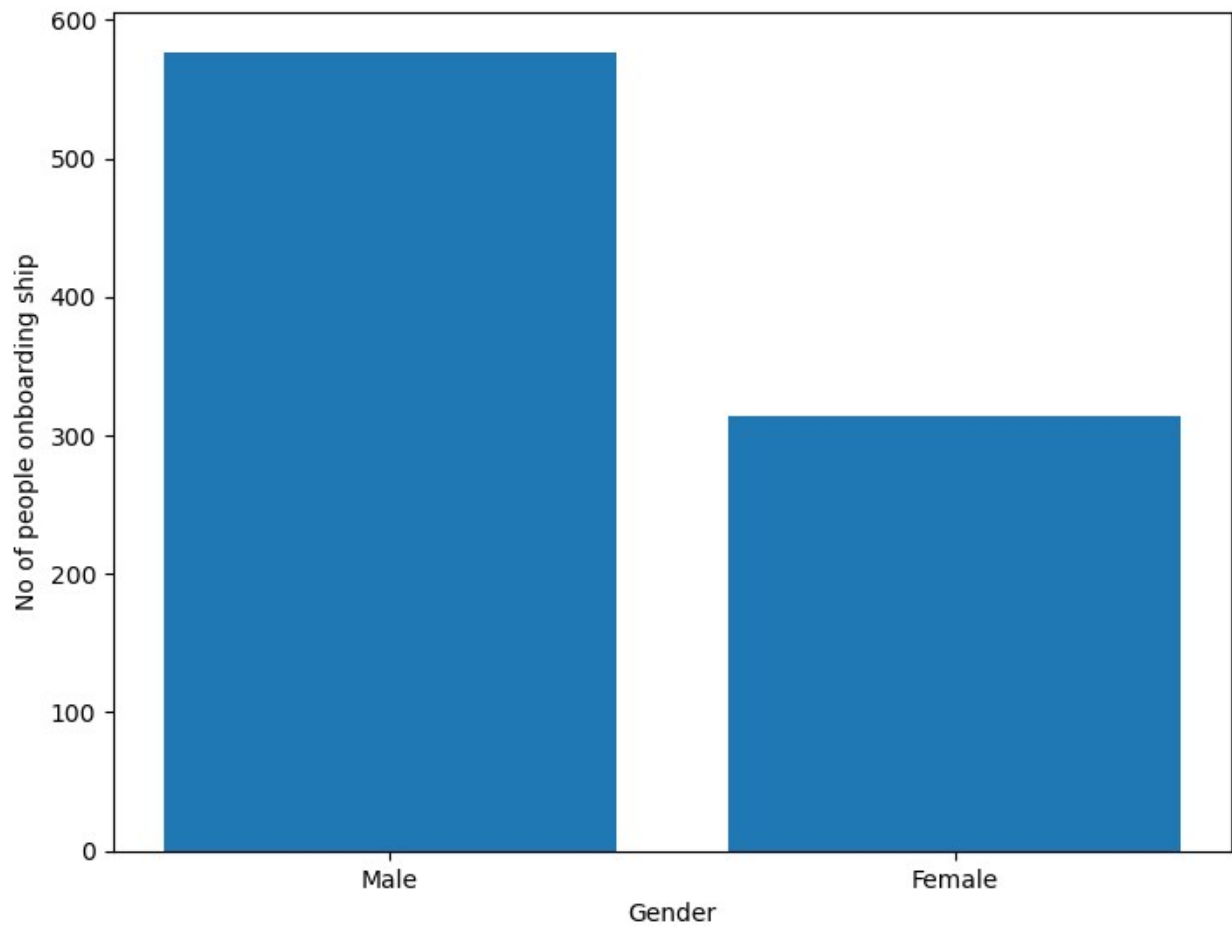
```
pd.set_option('display.max_columns',10,'display.width',1000)
train = pd.read_csv('train.csv')
test = pd.read_csv('test.csv')
train.head()
```

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

[5 rows x 12 columns]

#Plotting

```
fig = plt.figure()
ax = fig.add_axes([0,0,1,1])
gender = ['Male','Female']
index = [577,314]
ax.bar(gender,index)
plt.xlabel("Gender")
plt.ylabel("No of people onboarding ship")
plt.show()
```

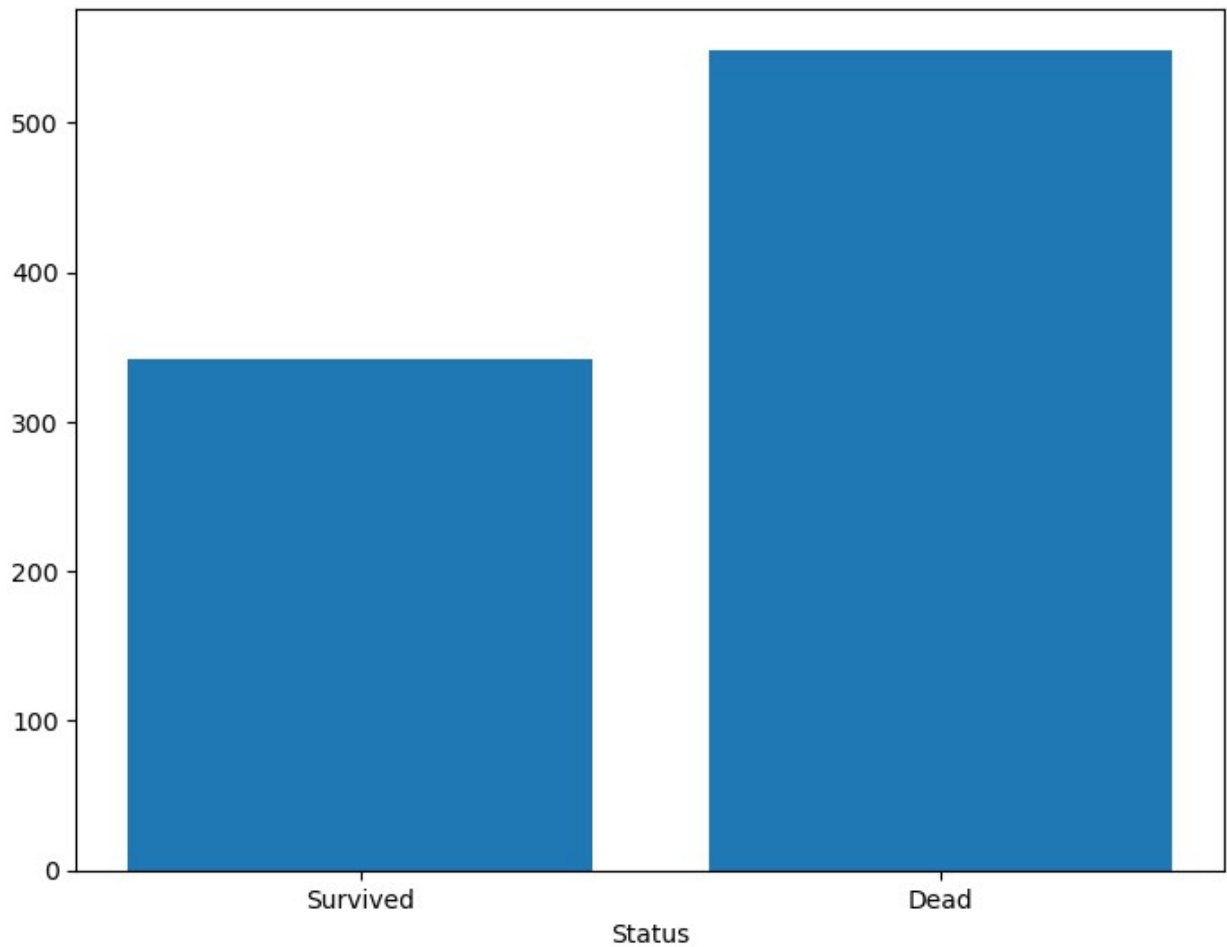


```
alive = len(train[train['Survived'] == 1])
dead = len(train[train['Survived'] == 0])

train.groupby('Sex')[['Survived']].mean()
```

```
Survived
Sex
female  0.742038
male    0.188908
```

```
fig = plt.figure()
ax = fig.add_axes([0,0,1,1])
status = ['Survived', 'Dead']
ind = [alive, dead]
ax.bar(status, ind)
plt.xlabel("Status")
plt.show()
```

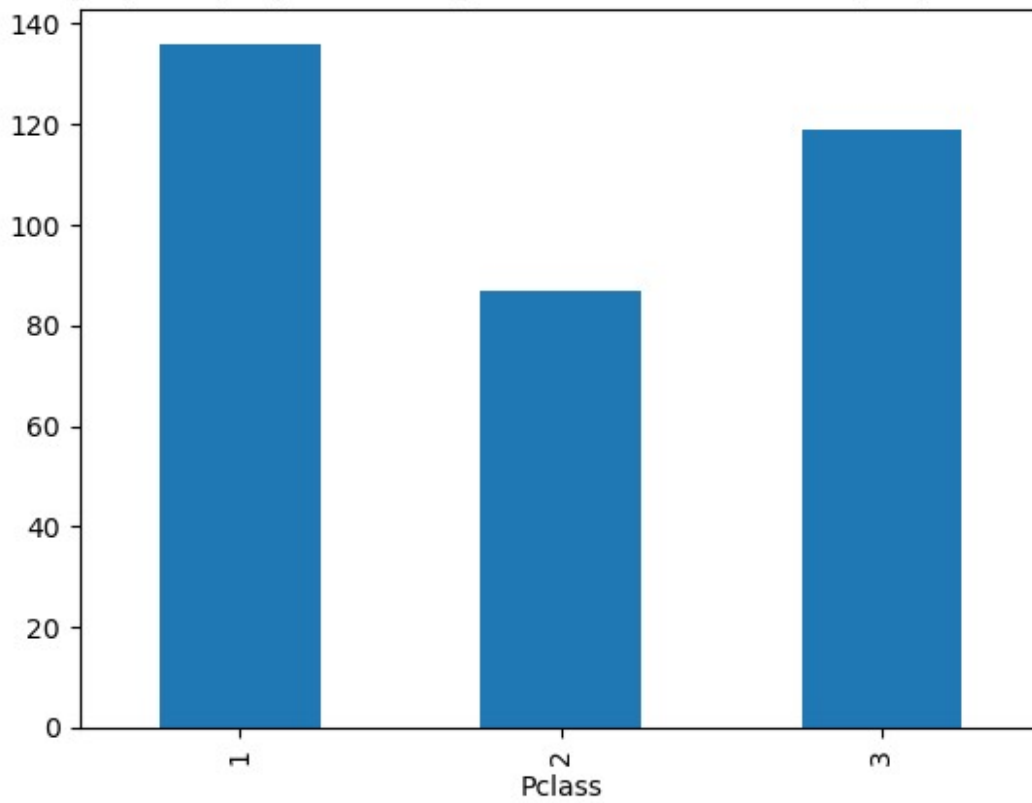


```
plt.figure(1)
train.loc[train['Survived'] == 1,
'Pclass'].value_counts().sort_index().plot.bar()
plt.title('Bar graph of people accrding to ticket class in which
people survived')
```

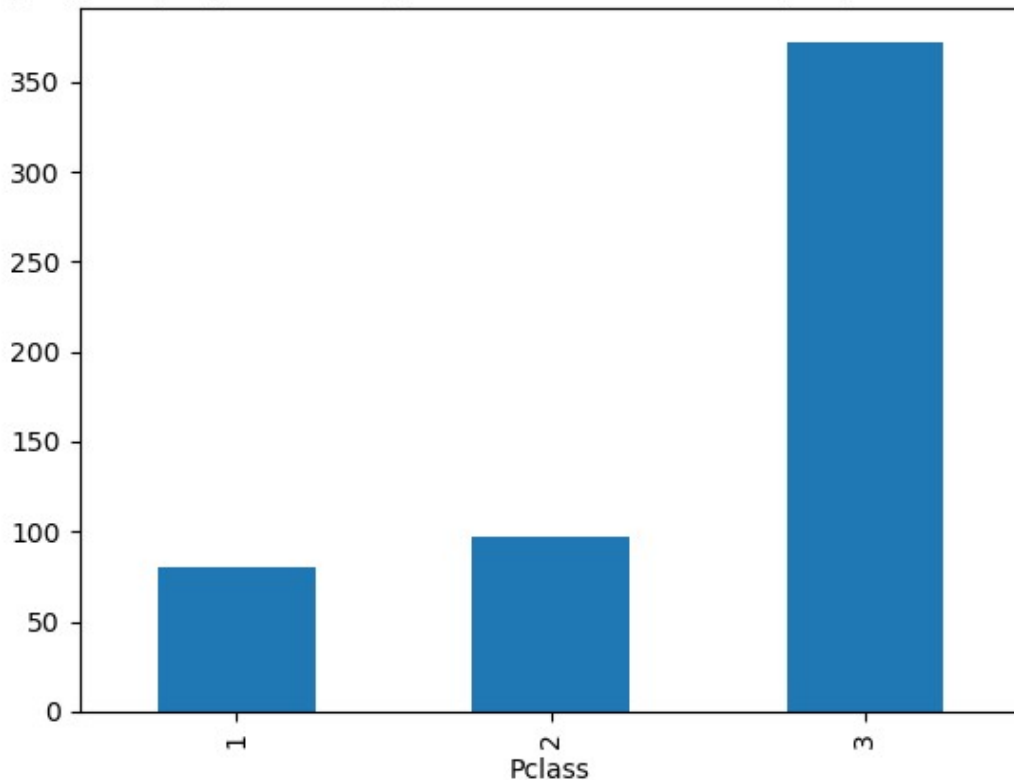
```
plt.figure(2)
train.loc[train['Survived'] == 0,
'Pclass'].value_counts().sort_index().plot.bar()
plt.title('Bar graph of people accrding to ticket class in which
people couldn\'t survive')
```

```
Text(0.5, 1.0, "Bar graph of people accrding to ticket class in which
people couldn't survive")
```

Bar graph of people accrding to ticket class in which people survived



Bar graph of people according to ticket class in which people couldn't survive



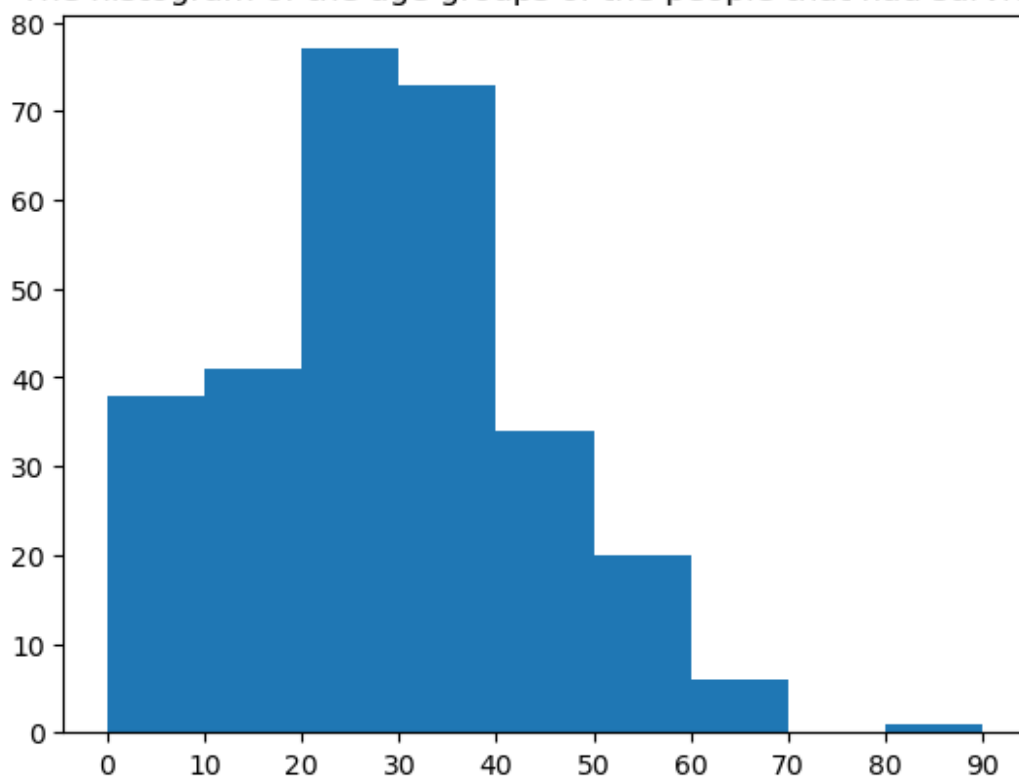
```
plt.figure(1)
age = train.loc[train.Survived == 1, 'Age']
plt.title('The histogram of the age groups of the people that had survived')
plt.hist(age, np.arange(0,100,10))
plt.xticks(np.arange(0,100,10))

plt.figure(2)
age = train.loc[train.Survived == 0, 'Age']
plt.title('The histogram of the age groups of the people that couldn\'t survive')
plt.hist(age, np.arange(0,100,10))
plt.xticks(np.arange(0,100,10))

([<matplotlib.axis.XTick at 0x2644e36a0f0>,
 <matplotlib.axis.XTick at 0x2644e431e80>,
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 <matplotlib.axis.XTick at 0x2644e7af620>],
```

```
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Text(10, 0, '10'),  
Text(20, 0, '20'),  
Text(30, 0, '30'),  
Text(40, 0, '40'),  
Text(50, 0, '50'),  
Text(60, 0, '60'),  
Text(70, 0, '70'),  
Text(80, 0, '80'),  
Text(90, 0, '90')])
```

The histogram of the age groups of the people that had survived



The histogram of the age groups of the people that couldn't survive

