```
import pandas as pd
df=pd.read_excel("titanic-passengers.xlsx")
df.head()
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fa
0	343	No	2	Collander, Mr. Erik Gustaf	male	28.0	0	0	248740	13.00
1	76	No	3	Moen, Mr. Sigurd Hansen	male	25.0	0	0	348123	7.65
				Jensen,						

```
df.columns
```

```
Index(['PassengerId', 'Survived', 'Pclass', 'Name', 'Sex', 'Age', 'SibSp',
       'Parch', 'Ticket', 'Fare', 'Cabin', 'Embarked'],
      dtype='object')
```

```
print(df.isnull().sum())
```

```
PassengerId      0
Survived         0
Pclass           0
Name             0
Sex              0
Age            177
SibSp            0
Parch            0
Ticket           0
Fare             0
Cabin          687
Embarked         2
dtype: int64
```

```
print(df.isnull().sum().sum())
```

```
866
```

```
print(df['Age'].isnull().sum())
```

```
177
```

```
print(df['Cabin'].isnull().sum())
```

```
687
```

```
df["Age"].fillna(df["Age"].mean(),inplace=True)
df.head(20)
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Tick
0	343	No	2	Collander, Mr. Erik Gustaf	male	28.000000	0	0	2487
1	76	No	3	Moen, Mr. Sigurd Hansen	male	25.000000	0	0	3481
2	641	No	3	Jensen, Mr. Hans Peder	male	20.000000	0	0	3500
3	568	No	3	Palsson, Mrs. Nils (Alma Cornelia Berglund)	female	29.000000	0	4	3499
4	672	No	1	Davidson, Mr. Thornton	male	31.000000	1	0	F. 127
5	105	No	3	Gustafsson, Mr. Anders Vilhelm	male	37.000000	2	0	31012
6	576	No	3	Patchett, Mr. George	male	19.000000	0	0	3585
7	382	Yes	3	Nakid, Miss. Maria ("Mary")	female	1.000000	0	2	26
8	228	No	3	Lovell, Mr. John Hall ("Henry")	male	20.500000	0	0	A 211
9	433	Yes	2	Louch, Mrs. Charles Alexander (Alice	female	42.000000	1	0	SC/A 30

```
df["Embarked"].value_counts()
```

```
S    644
C    168
Q     77
Name: Embarked, dtype: int64
```

```
df["Cabin"].value_counts()
```

```
G6             4
B96 B98        4
C23 C25 C27    4
F2             3
E101           3
              ..
D28            1
B102           1
A16            1
```

```
C45            1
B94            1
Name: Cabin, Length: 147, dtype: int64
```

```
df["Cabin"].fillna('G6',inplace=True)
df["Cabin"].value_counts()
```

```
G6             691
B96 B98          4
C23 C25 C27      4
F2               3
E101             3
                ...
D28              1
B102             1
A16              1
C45              1
B94              1
Name: Cabin, Length: 147, dtype: int64
```

```
df["Embarked"].fillna('S',inplace=True)
df["Embarked"].value_counts()
```

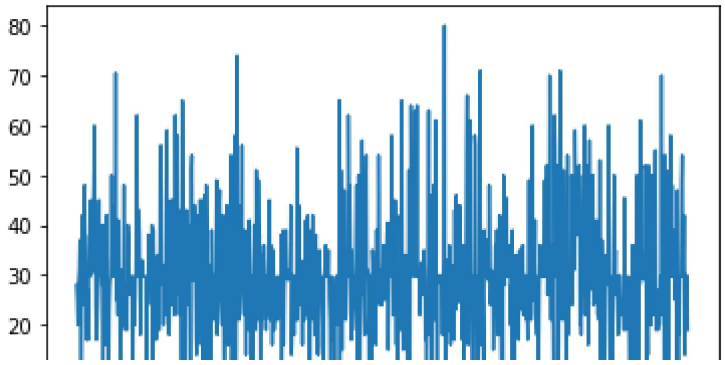
```
S    646
C    168
Q     77
Name: Embarked, dtype: int64
```

```
df.isnull().sum()
```

```
PassengerId    0
Survived       0
Pclass         0
Name           0
Sex            0
Age            0
SibSp          0
Parch          0
Ticket         0
Fare           0
Cabin          0
Embarked       0
dtype: int64
```

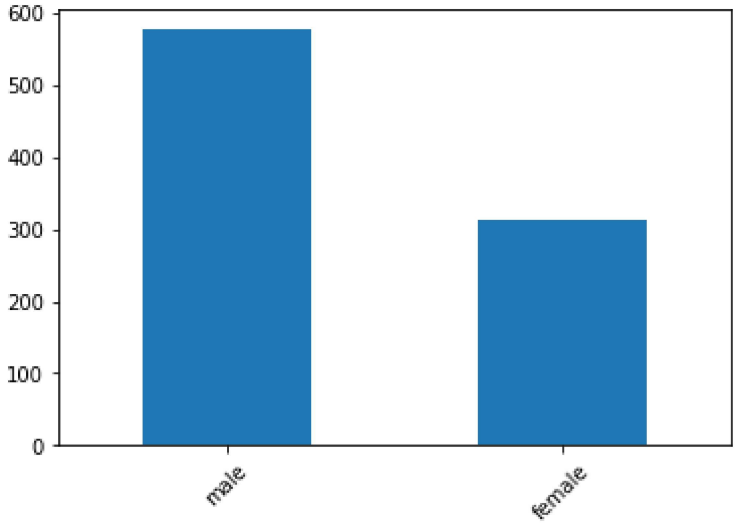
```
import matplotlib.pyplot as plt
import seaborn as sns
```

```
plt.plot(df["Age"])
plt.show()
```



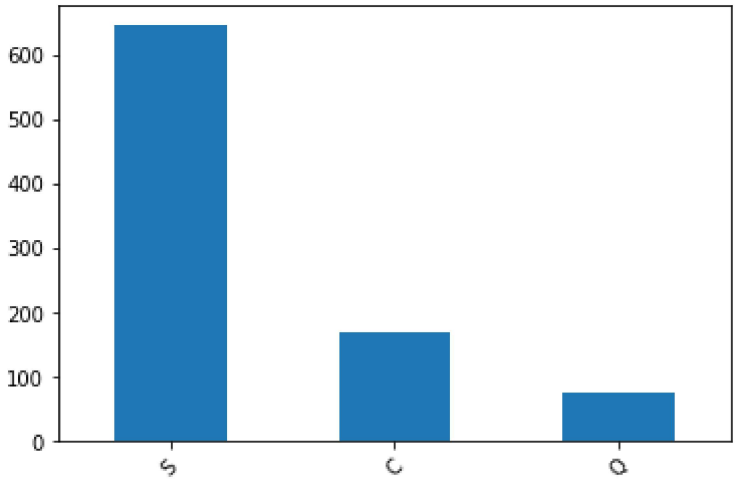

```
p=df["Sex"].value_counts()
p.plot.bar(rot=45)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fd831d76750>
```



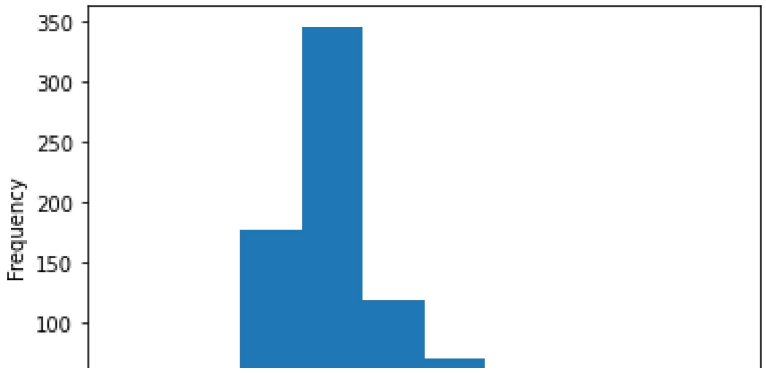

```
p=df["Embarked"].value_counts()
p.plot.bar(rot=45)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fd831cf9f50>
```



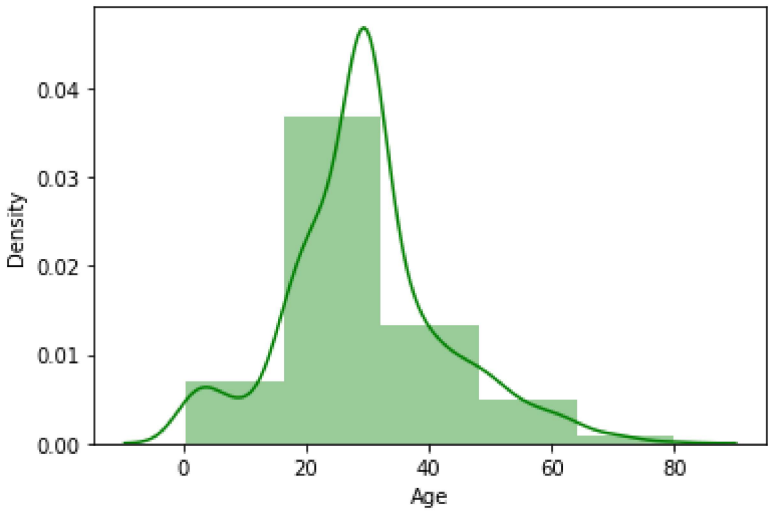

```
df['Age'].plot.hist()
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fd831ce30d0>
```



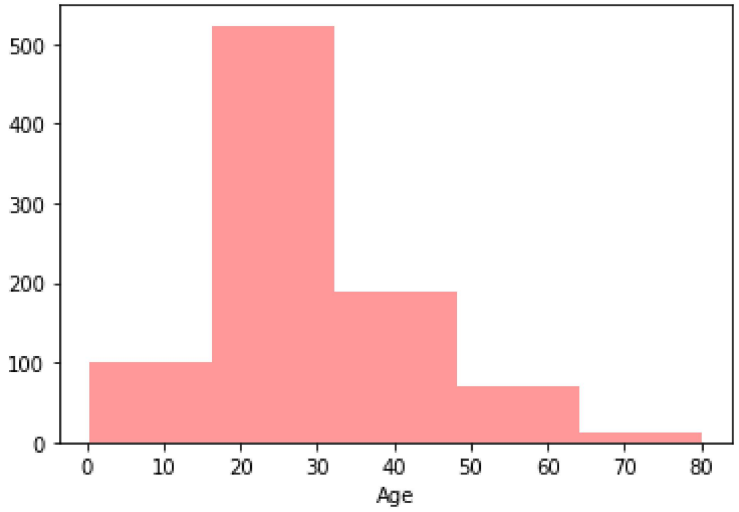

```
sns.distplot(df['Age'],bins=5,hist=True,kde=True,color='green')
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/distributions.py:2557: FutureWarning:
  warnings.warn(msg, FutureWarning)
<matplotlib.axes._subplots.AxesSubplot at 0x7fd831ba3310>
```




```
sns.distplot(df['Age'],bins=5,hist=True,kde=False,color='red')
```

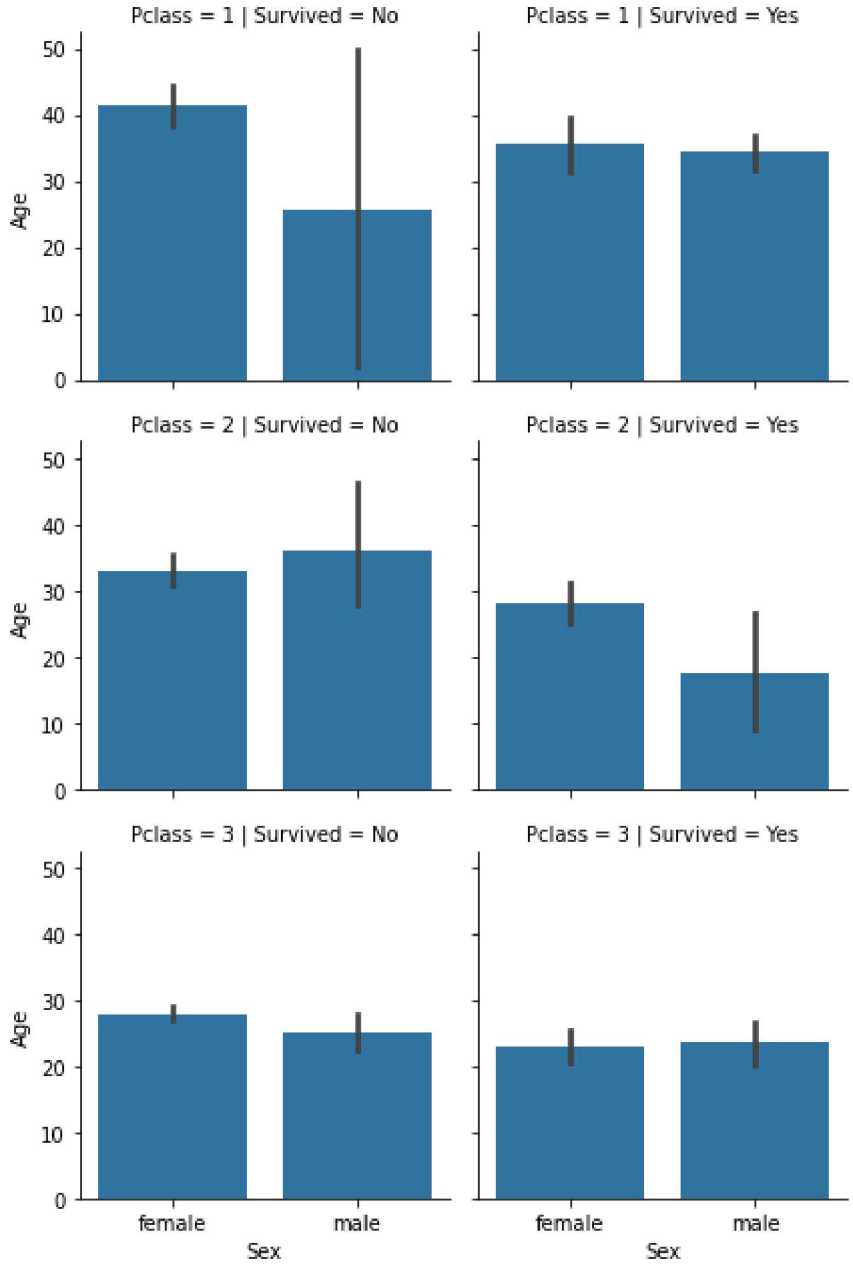
```
/usr/local/lib/python3.7/dist-packages/seaborn/distributions.py:2557: FutureWarning:
  warnings.warn(msg, FutureWarning)
<matplotlib.axes._subplots.AxesSubplot at 0x7fd831dded50>
```




```
grid=sns.FacetGrid(df,row='Pclass',col='Survived')
```

```
grid.map(sns.barplot,'Sex','Age')
grid.add_legend()
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/axisgrid.py:643: UserWarning: Using t
  warnings.warn(warning)
<seaborn.axisgrid.FacetGrid at 0x7fd82e67ed10>
```




```
def plot_correlation_map(df) :
  corr=df.corr()
  s,ax=plt.subplots(figsize=(12,10))
  cmap=sns.diverging_palette(220,10,as_cmap=True)

  s=sns.heatmap(cbar_kws={'shrink':.9}
      ax=ax,
      annot=True
      annot_kws={'fontsize':12}
      cbar_kws={'shrink':.9}
      ax=ax,
      annot=True
      annot_kws={'fontsize':12}
```

```
)

plot_correlation_map(df)
```

```
  File "<ipython-input-41-add9be1b3409>", line 7
    ax=ax,
     ^
SyntaxError: invalid syntax
```

SEARCH STACK OVERFLOW

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