

```
import pandas as pd

data=pd.read_csv("titanic.csv")

data.head()
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Thayer)	female	38.0	1	0	PC 17599	71.2833

```
print(data)
```

	PassengerId	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 Thayer)	female	38.0	1	0	PC 17599	71.2833	C85	C
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
..	...	...	...	...	...	...	...	...	...	...	...	...
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.0000	NaN	S
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.0000	B42	S
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	0	W./C. 6607	23.4500	NaN	S
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.0000	C148	C
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.7500	NaN	Q

[891 rows x 12 columns]

```
data.isnull()
```

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin
0	False	False	False	False	False	False	False	False	False	True
1	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	True
3	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	True
...	...	...	...	...	...	...	...	...	...	...
886	False	False	False	False	False	False	False	False	False	True
887	False	False	False	False	False	False	False	False	False	False
888	False	False	False	False	False	True	False	False	False	True
889	False	False	False	False	False	False	False	False	False	False
890	False	False	False	False	False	False	False	False	False	True

891 rows × 12 columns

```
Data_temp=data
```

```
data.info()
```

-----

AttributeError

Traceback (most recent call last)

<ipython-input-31-6208d269f320> in <cell line: 1>()  
----> 1 data.info()

AttributeError: 'function' object has no attribute 'info'

SEARCH STACK OVERFLOW

```
data.dropna()
```

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599 71.283
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803 53.100
6	7	0	1	McCarthy, Mr. Timothy J	male	54.0	0	0	17463 51.862
10	11	1	3	Sandstrom, Miss. Marguerite Rut	female	4.0	1	1	PP 9549 16.700

Bonnell

```
data.dropna(axis=0)  
#if we write axis=1 it will delete the column means a attribute or feature whole column in which if we had atleast 1 null value it  
#will deleted ut if we write axis=0 it will dele the row which are null.
```

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
1	2	1	1Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.283
3	4	1	1Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.100
6	7	0	1McCarthy, Mr. Timothy J	male	54.0	0	0	17463	51.862
10	11	1	3Sandstrom, Miss. Marguerite Rut	female	4.0	1	1	PP 9549	16.700
Ronnell									

```
data=data.drop
```

```
data.describe()
```

-----

AttributeError

Traceback (most recent call last)

<ipython-input-21-2bb0b18689d4> in <cell line: 1>()

----> 1 data.describe()

AttributeError: 'function' object has no attribute 'describe'

SEARCH STACK OVERFLOW

```
Data_temp=Data_temp["Age"].fillna(30)
```

```
print(data)
```

<bound method DataFrame.drop of				PassengerId	Survived	Pclass	\		
0	1	0	3						
1	2	1	1						
2	3	1	3						
3	4	1	1						
4	5	0	3						
..	...	...	...						
886	887	0	2						
887	888	1	1						
888	889	0	3						
889	890	1	1						
890	891	0	3						
				Name	Sex	Age	SibSp	\	
0				Braund, Mr. Owen Harris	male	22.0	1		
1				Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1		
2				Heikkinen, Miss. Laina	female	26.0	0		
3				Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1		
4				Allen, Mr. William Henry	male	35.0	0		
..				...	...	...	...		
886				Montvila, Rev. Juozas	male	27.0	0		
887				Graham, Miss. Margaret Edith	female	19.0	0		
888				Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1		
889				Behr, Mr. Karl Howell	male	26.0	0		
890				Dooley, Mr. Patrick	male	32.0	0		
	Parch	Ticket	Fare	Cabin	Embarked				
0	0	A/5 21171	7.2500	NaN	S				
1	0	PC 17599	71.2833	C85	C				
2	0	STON/O2. 3101282	7.9250	NaN	S				
3	0	113803	53.1000	C123	S				
4	0	373450	8.0500	NaN	S				
..	...	...	...	...	...				
886	0	211536	13.0000	NaN	S				
887	0	112053	30.0000	B42	S				
888	2	W./C. 6607	23.4500	NaN	S				
889	0	111369	30.0000	C148	C				

```
890      0      370376  7.7500  NaN      Q
```

```
[891 rows x 12 columns]>
```

```
data=pd.read_csv("\titanic.csv")
```

```
-----
FileNotFoundError                                Traceback (most recent call last)
<ipython-input-26-fd5a6c88d20c> in <cell line: 1>()
----> 1 data=pd.read_csv("\titanic.csv")

-----
6 frames
/usr/local/lib/python3.10/dist-packages/pandas/io/common.py in get_handle(path_or_buf,
mode, encoding, compression, memory_map, is_text, errors, storage_options)
    854     if ioargs.encoding and "b" not in ioargs.mode:
    855         # Encoding
--> 856         handle = open(
    857             handle,
    858             ioargs.mode,

FileNotFoundError: [Errno 2] No such file or directory: '\titanic.csv'
```

SEARCH STACK OVERFLOW

```
Data_temp["Pclass"]=Data_temp["Pclass"].fillna("temp")
```

```
Data_temp["Age"]=Data_temp["Age"].fillna(30)
```

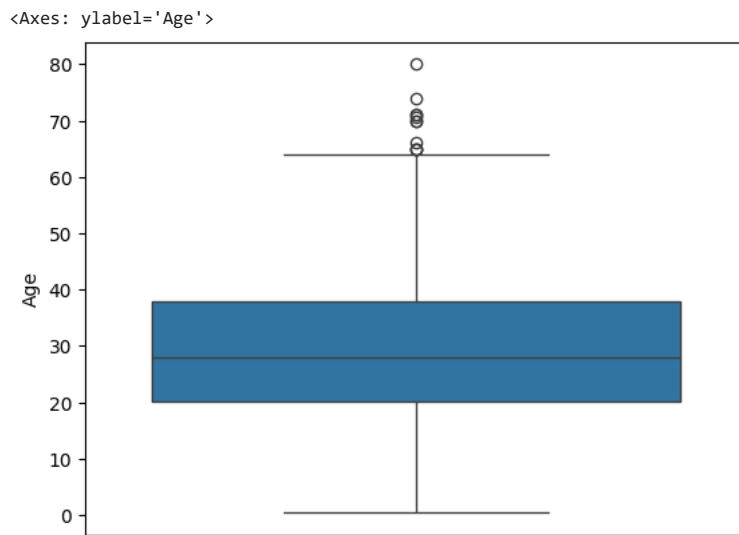
```
Data_temp["Cabin"]=Data_temp["Cabin"].fillna(5)
```

```
#box plot
```

```
data=pd.read_csv("titanic.csv")
```

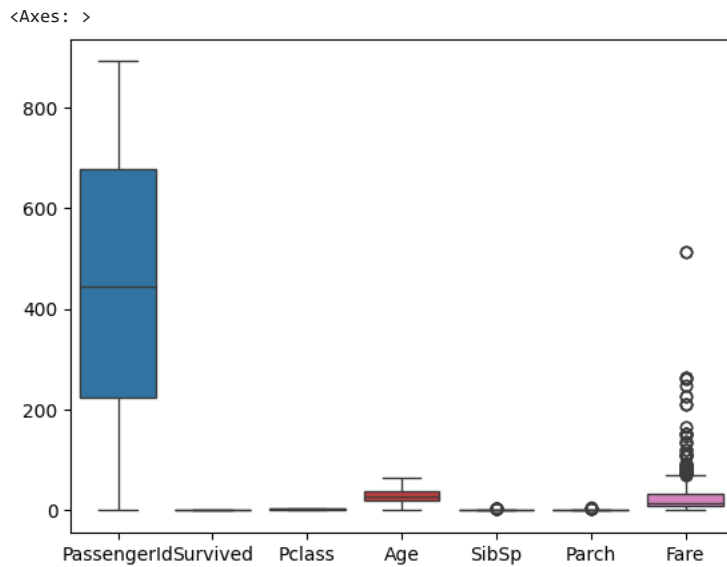
```
import seaborn as sns
```

```
sns.boxplot(data["Age"])
```

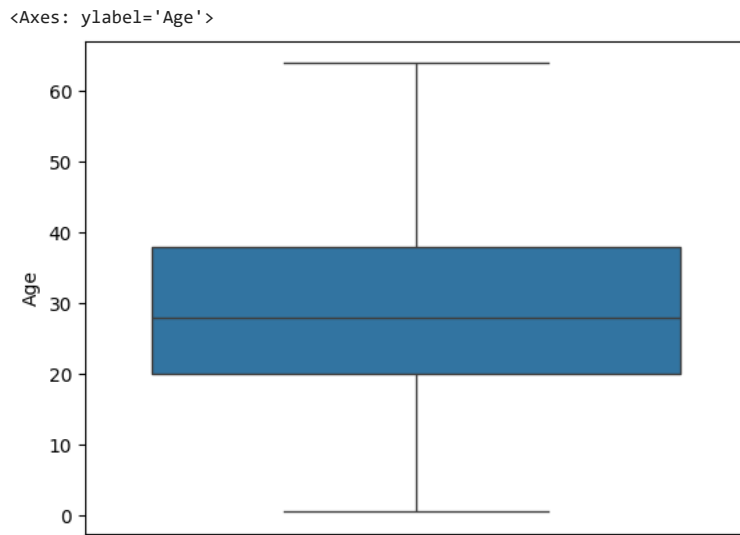


```
removedoutliers=data[data["Age"]<65]
```

```
sns.boxplot(removedoutliers)
```



```
sns.boxplot(removedoutliers["Age"])
```



```
new_data=data[data["Age"]>65]
```

```
#duplicates
data=data.sort_values("Name")
```

```
dup=data["Name"].duplicated()
```

```
data[dup]
```

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
1	0	3	Mr. Brown	Male	22	1	0	12345	54.0	C123	S
2	1	1	Mr. White	Male	30	0	0	67890	51.0	A456	C
3	0	3	Mr. Green	Male	19	0	0	11223	33.0	F789	Q
4	1	2	Mr. Black	Male	26	0	0	44556	51.0	D012	S
5	0	3	Mr. Grey	Male	18	0	0	77889	33.0	E345	C
6	1	1	Mr. Red	Male	35	0	0	99001	51.0	B678	Q
7	0	3	Mr. Blue	Male	20	0	0	22334	33.0	G901	S
8	1	2	Mr. Yellow	Male	28	0	0	55667	51.0	H234	C
9	0	3	Mr. Purple	Male	17	0	0	88990	33.0	I567	Q
10	1	1	Mr. Orange	Male	32	0	0	33445	51.0	J890	S

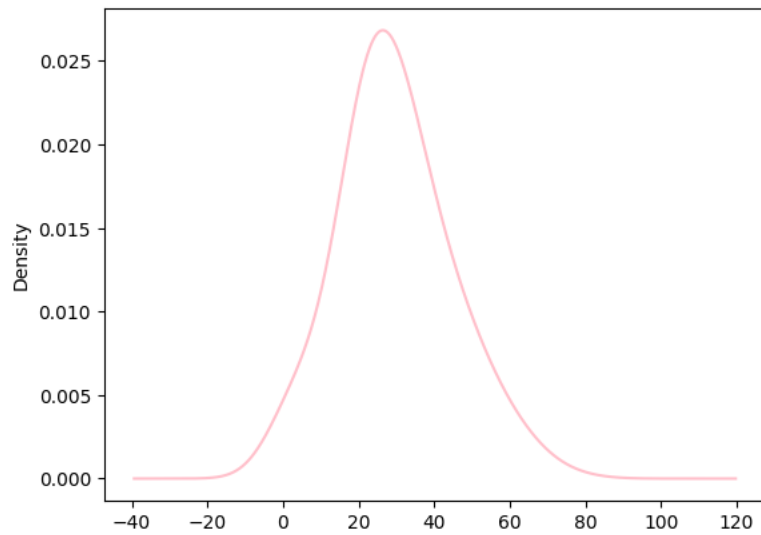
```
data_age=data["Age"]
scaler=MinMaxScaler()
```

```
data=pd.read_csv("titanic.csv")
```

```
print=(data.isnull().sum())
```

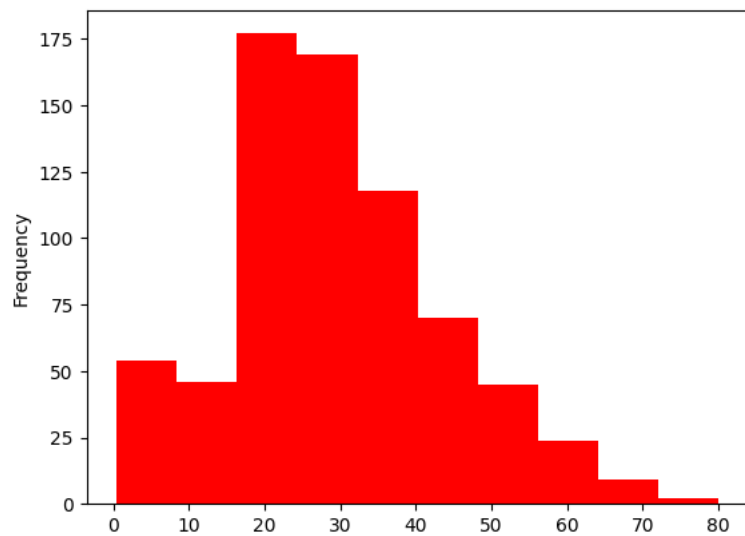
```
data["Age"].plot.density(bw_method=0.5,color="pink")
#you can change the color as per your choice
```

<Axes: ylabel='Density'>



```
data["Age"].plot.hist(color="red")
```

<Axes: ylabel='Frequency'>



```
data["Age"].plot.pie(color="black")
```

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-20-8bc78f0aecdf> in <cell line: 1>()  
----> 1 data["Age"].plot.pie(color="black")
```

⬆ 5 frames

```
/usr/local/lib/python3.10/dist-packages/matplotlib/... in ...  
data = *args **kwargs
```