

data manipulation

```
import pandas as pd
```

```
titanic=pd.read_csv("/content/Titanic.csv")
```

```
titanic
```

	pclass	survived	name	sex	age	sibsp	parch	ticket	fare	ca
0	1	1	Allen, Miss. Elisabeth Walton	female	29.00	0	0	24160	211.3375	

```
titanic.head(6)
```

	pclass	survived	name	sex	age	sibsp	parch	ticket	fare	cabin
0	1	1	Allen, Miss. Elisabeth Walton	female	29.00	0	0	24160	211.3375	B5
1	1	1	Allison, Master. Hudson Trevor	male	0.92	1	2	113781	151.5500	C22 C26
2	1	0	Allison, Miss. Helen Loraine	female	2.00	1	2	113781	151.5500	C22 C26
3	1	0	Allison, Mr. Hudson Joshua Creighton	male	30.00	1	2	113781	151.5500	C22 C26
4	1	0	Allison, Mrs. Hudson J C (Bessie Waldo Daniels)	female	25.00	1	2	113781	151.5500	C22 C26
5	1	1	Anderson, Mr. Harry	male	48.00	0	0	19952	26.5500	E12



1309 rows × 14 columns

```
titanic.tail(6)
```

	pclass	survived	name	sex	age	sibsp	parch	ticket	fare	cabin
1303	3	0	Yousseff, Mr. Gerious	male	NaN	0	0	2627	14.4583	NaN
1304	3	0	Zabour, Miss. Hileni	female	14.5	1	0	2665	14.4542	NaN
1305	3	0	Zabour, Miss. Thamine Zakarian,	female	NaN	1	0	2665	14.4542	NaN

```
titanic.corr()
```

	pclass	survived	age	sibsp	parch	fare	body
pclass	1.000000	-0.312469	-0.408106	0.060832	0.018322	-0.558629	-0.034642
survived	-0.312469	1.000000	-0.055512	-0.027825	0.082660	0.244265	NaN
age	-0.408106	-0.055512	1.000000	-0.243699	-0.150917	0.178740	0.058809
sibsp	0.060832	-0.027825	-0.243699	1.000000	0.373587	0.160238	-0.099961
parch	0.018322	0.082660	-0.150917	0.373587	1.000000	0.221539	0.051099
fare	-0.558629	0.244265	0.178740	0.160238	0.221539	1.000000	-0.043110
body	-0.034642	NaN	0.058809	-0.099961	0.051099	-0.043110	1.000000



```
titanic['age'].nlargest(3)
```

```
14      80.0
61      76.0
1235    74.0
Name: age, dtype: float64
```

```
titanic['fare'].min()
```

```
0.0
```

```
titanic.describe()
```

	pclass	survived	age	sibsp	parch	fare	
count	1309.000000	1309.000000	1046.000000	1309.000000	1309.000000	1308.000000	1309
mean	2.294882	0.381971	29.881138	0.498854	0.385027	33.295479	1309
std	0.837836	0.486055	14.413493	1.041658	0.865560	51.758668	1309
min	1.000000	0.000000	0.170000	0.000000	0.000000	0.000000	1309
25%	2.000000	0.000000	21.000000	0.000000	0.000000	7.895800	1309

```
titanic.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1309 entries, 0 to 1308
Data columns (total 14 columns):
#   Column      Non-Null Count  Dtype
---  -
0   pclass      1309 non-null   object
1   survived    1309 non-null   int64
2   name        1309 non-null   object
3   sex         1309 non-null   object
4   age         1046 non-null   float64
5   sibsp       1309 non-null   int64
6   parch       1309 non-null   int64
7   ticket      1309 non-null   object
8   fare        1308 non-null   float64
9   cabin       295 non-null    object
10  embarked    1307 non-null   object
11  boat        486 non-null    object
12  body        121 non-null    float64
13  home.dest    745 non-null    object
dtypes: float64(3), int64(3), object(8)
memory usage: 143.3+ KB
```

```
titanic['pclass']=titanic['pclass'].astype('object')
```

```
titanic['pclass']=titanic['pclass'].astype('int64')
```

```
titanic.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1309 entries, 0 to 1308
Data columns (total 14 columns):
#   Column      Non-Null Count  Dtype
---  -
0   pclass      1309 non-null   int64
1   survived    1309 non-null   int64
2   name        1309 non-null   object
3   sex         1309 non-null   object
4   age         1046 non-null   float64
5   sibsp       1309 non-null   int64
6   parch       1309 non-null   int64
7   ticket      1309 non-null   object
8   fare        1308 non-null   float64
9   cabin       295 non-null    object
```

```
10 embarked    1307 non-null    object
11 boat         486 non-null    object
12 body         121 non-null    float64
13 home.dest    745 non-null    object
dtypes: float64(3), int64(4), object(7)
memory usage: 143.3+ KB
```

```
titanic['embarked'].nunique()
```

```
3
```

```
titanic.replace({'sex':{'male':0,'female':1}})
```

	pclass	survived	name	sex	age	sibsp	parch	ticket	fare	cabin
0	1	1	Allen, Miss. Elisabeth Walton	1	29.00	0	0	24160	211.3375	B5
1	1	1	Allison, Master. Hudson Trevor	0	0.92	1	2	113781	151.5500	C25 C26
2	1	0	Allison, Miss. Helen Loraine	1	2.00	1	2	113781	151.5500	C25 C26
3	1	0	Allison, Mr. Hudson Joshua Creighton	0	30.00	1	2	113781	151.5500	C25 C26
4	1	0	Allison, Mrs. Hudson J C (Bessie Waldo Daniels)	1	25.00	1	2	113781	151.5500	C25 C26
...

✓

0s

completed at 11:32 PM

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