

```
import pandas as pd

titanic = pd.read_csv('https://github.com/YBIFoundation/Dataset/raw/main/Titanic.csv')

titanic.head()
```

	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	male	30.00	1	2	113781	151.5500	C22 C26

```
titanic.tail()
```


	pclass	survived	name	sex	age	sibsp	parch	ticket	fare	ca
1304	3	0	Zabour, Miss. Hileni	female	14.5	1	0	2665	14.4542	
1305	3	0	Zabour, Miss. Thamine	female	NaN	1	0	2665	14.4542	
1306	3	0	Zakarian, Mr. Mapriededer	male	26.5	0	0	2656	7.2250	
1307	3	0	Zakarian, Mr. Nour	male	27.0	0	0	2656	7.2250	

```
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.describe()
```



	pclass	survived	age	sibsp	parch	fare	
count	1309.000000	1309.000000	1046.000000	1309.000000	1309.000000	1308.000000	12
mean	2.294882	0.381971	29.881138	0.498854	0.385027	33.295479	16
std	0.837836	0.486055	14.413493	1.041658	0.865560	51.758668	9
min	1.000000	0.000000	0.170000	0.000000	0.000000	0.000000	
25%	2.000000	0.000000	21.000000	0.000000	0.000000	7.895800	7
50%	3.000000	0.000000	28.000000	0.000000	0.000000	14.454200	15
75%	3.000000	1.000000	39.000000	1.000000	0.000000	31.275000	25
max	3.000000	1.000000	80.000000	8.000000	9.000000	512.329200	32

```
titanic.describe(include='all')
```



	pclass	survived	name	sex	age	sibsp	
count	1309.000000	1309.000000	1309	1309	1046.000000	1309.000000	1309.0
unique	NaN	NaN	1307	2	NaN	NaN	
top	NaN	NaN	Connolly, Miss. Kate	male	NaN	NaN	
freq	NaN	NaN	2	843	NaN	NaN	
mean	2.294882	0.381971	NaN	NaN	29.881138	0.498854	0.3
std	0.837836	0.486055	NaN	NaN	14.413493	1.041658	0.8
min	1.000000	0.000000	NaN	NaN	0.170000	0.000000	0.0
25%	2.000000	0.000000	NaN	NaN	21.000000	0.000000	0.0
50%	3.000000	0.000000	NaN	NaN	28.000000	0.000000	0.0
75%	3.000000	1.000000	NaN	NaN	39.000000	1.000000	0.0
max	3.000000	1.000000	NaN	NaN	80.000000	8.000000	9.0

```
#display shape
```

```
titanic.shape
```

```
➞ (1309, 14)
```

```
#display coloumn label
```

```
titanic.columns
```

```
➞ Index(['pclass', 'survived', 'name', 'sex', 'age', 'sibsp', 'parch',  
        'ticket',  
        'fare', 'cabin', 'embarked', 'boat', 'body', 'home.dest'],  
        dtype='object')
```

```
#display row index
```

```
titanic.index
```

```
➞ RangeIndex(start=0, stop=1309, step=1)
```

```
#coloumn
```

```
titanic['sex']
```

```
➞
```

	sex
0	female
1	male
2	female
3	male
4	female
...	...
1304	female
1305	female
1306	male
1307	male
1308	male

```
1309 rows × 1 columns
```

```
dtype: object
```

```
titanic['sex'].shape
```

```
→ (1309,)
```

```
titanic[('sex')]
```

```
→
```

	sex
0	female
1	male
2	female
3	male
4	female
...	...
1304	female
1305	female
1306	male
1307	male
1308	male

1309 rows × 1 columns

dtype: object

```
titanic['sex'].unique()
```

```
→ array(['female', 'male'], dtype=object)
```

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

```
→ 2
```

```
titanic.isna().sum()
```

```
→
```

	0
pclass	0
survived	0
name	0
sex	0
age	263
sibsp	0
parch	0
ticket	0

```
titanic.isnull().sum()
```



	0
pclass	0
survived	0
name	0
sex	0
age	263
sibsp	0
parch	0
ticket	0
fare	1
cabin	1014
embarked	2
boat	823
body	1188
home.dest	564

dtype: int64

```
titanic.values
```



```
array([[1, 1, 'Allen, Miss. Elisabeth Walton', ..., '2', nan,
        'St Louis, MO'],
       [1, 1, 'Allison, Master. Hudson Trevor', ..., '11', nan,
        'Montreal, PQ / Chesterville, ON'],
       [1, 0, 'Allison, Miss. Helen Loraine', ..., nan, nan,
        'Montreal, PQ / Chesterville, ON'],
       ...,
       ...])
```

```
[3, 0, 'Zakarian, Mr. Mapriededer', ..., nan, 304.0, nan],  
[3, 0, 'Zakarian, Mr. Ortin', ..., nan, nan, nan],  
[3, 0, 'Zimmerman, Mr. Leo', ..., nan, nan, nan]], dtype=object)
```

titanic.sex.values

```
⇒ array(['female', 'male', 'female', ..., 'male', 'male', 'male'],  
      dtype=object)
```