

```
In [1]: import pandas as pd
```

```
In [2]: df=pd.read_csv("Data_set.csv")
```

```
In [3]: df.head(10)
```

```
Out[3]:
```

	show_name	country	num_episodes	aired_on	original_network	rating	current_overall_rank	lifetime_popularity_rank	watchers
0	NaN	South Korea	16	Friday, Saturday	tvN	8.9	33.0	1	111706.0
1	NaN	South Korea	16	Friday, Saturday	jTBC	8.7	89.0	2	100950.0
2	Descendants of the Sun	South Korea	16	Wednesday, Thursday	KBS2	8.7	77.0	3	96318.0
3	Boys Over Flowers	South Korea	25	Monday, Tuesday	KBS2	7.7	2249.0	4	94228.0
4	W	South Korea	16	Wednesday, Thursday	MBC	8.5	201.0	5	92121.0
5	You Who Came from the Stars	South Korea	21	Wednesday, Thursday	SBS	8.6	112.0	6	91360.0
6	Weightlifting Fairy Kim Bok Joo	South Korea	16	Wednesday, Thursday	MBC	8.8	40.0	7	91330.0
7	The Heirs	South Korea	20	Wednesday, Thursday	SBS	7.5	2817.0	8	90467.0
8	Pinocchio	South Korea	20	Wednesday, Thursday	SBS	NaN	273.0	9	82893.0
9	Healer	South Korea	20	Monday, Tuesday	KBS2	8.9	25.0	10	NaN

In [4]:

```
df.tail()
```

Out[4]:

	show_name	country	num_episodes	aired_on	original_network	rating	current_overall_rank	lifetime_popularity_rank	watchers
95	Shut Up: Flower Boy Band	South Korea	16	Monday, Tuesday	tvN	8.1	806.0	99	34668.0
96	Blood	South Korea	20	Monday, Tuesday	KBS2	7.4	3271.0	100	34666.0
97	Chicago Typewriter	South Korea	16	Friday, Saturday	tvN	8.8	51.0	101	NaN
98	Sungkyunkwan Scandal	South Korea	20	Monday, Tuesday	KBS2	8.2	605.0	102	34615.0
99	Vagabond	South Korea	16	Friday, Saturday	SBS, Netflix	8.5	238.0	103	34523.0

In [5]:

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 100 entries, 0 to 99
Data columns (total 9 columns):
#   Column                Non-Null Count  Dtype
---  -
0   show_name              96 non-null    object
1   country                100 non-null   object
2   num_episodes           100 non-null   int64
3   aired_on               99 non-null    object
4   original_network       99 non-null    object
5   rating                 96 non-null    float64
6   current_overall_rank   97 non-null    float64
7   lifetime_popularity_rank 100 non-null   int64
8   watchers               97 non-null    float64
dtypes: float64(3), int64(2), object(4)
memory usage: 7.2+ KB
```

In [6]:

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

Out[6]: show_name 4

```
country          0
num_episodes     0
aired_on         1
original_network  1
rating           4
current_overall_rank  3
lifetime_popularity_rank  0
watchers         3
dtype: object
```

```
In [7]: df.describe()
```

```
Out[7]:
```

	num_episodes	rating	current_overall_rank	lifetime_popularity_rank	watchers
count	100.000000	96.000000	97.000000	100.000000	97.000000
mean	18.980000	8.293750	731.247423	51.650000	52994.907216
std	6.846041	0.424714	857.597007	30.133164	17551.028458
min	8.000000	7.300000	2.000000	1.000000	34523.000000
25%	16.000000	8.100000	194.000000	25.750000	39545.000000
50%	16.000000	8.300000	441.000000	51.500000	46963.000000
75%	20.000000	8.600000	806.000000	77.250000	63140.000000
max	50.000000	9.100000	3788.000000	103.000000	111706.000000

```
In [11]: df['show_name']=df['show_name'].fillna(df['show_name'].mode()[0])
df.isnull().sum()
```

```
Out[11]: show_name          0
country          0
num_episodes     0
aired_on         1
original_network  1
rating           4
current_overall_rank  3
lifetime_popularity_rank  0
watchers         3
dtype: int64
```

```
In [12]: df['aired_on']=df['aired_on'].fillna(df['aired_on'].mode()[0])
df.isnull().sum()
```

```
Out[12]: show_name          0
country          0
num_episodes     0
aired_on         0
original_network  1
rating           4
current_overall_rank  3
lifetime_popularity_rank  0
watchers         3
dtype: int64
```

```
In [13]: df['original_network']=df['original_network'].fillna(df['original_network'].mode()[0])
df.isnull().sum()
```

```
Out[13]: show_name          0
country          0
num_episodes     0
aired_on         0
original_network  0
rating           4
current_overall_rank  3
lifetime_popularity_rank  0
watchers         3
dtype: int64
```

```
In [16]: df['rating']=df['rating'].fillna(df['rating'].mean())
df.isnull().sum()
```

```
Out[16]: show_name          0
country          0
num_episodes     0
aired_on         0
original_network  0
rating           0
current_overall_rank  3
lifetime_popularity_rank  0
watchers         3
dtype: int64
```

```
In [17]: df['current_overall_rank']=df['current_overall_rank'].fillna(df['current_overall_rank'].median())
df.isnull().sum()
```

```
Out[17]: show_name          0
country            0
num_episodes       0
aired_on           0
original_network    0
rating             0
current_overall_rank 0
lifetime_popularity_rank 0
watchers           3
dtype: int64
```

```
In [18]: df['watchers']=df['watchers'].fillna(df['watchers'].median())
df.isnull().sum()
```

```
Out[18]: show_name          0
country            0
num_episodes       0
aired_on           0
original_network    0
rating             0
current_overall_rank 0
lifetime_popularity_rank 0
watchers           0
dtype: int64
```

```
In [19]: df
```

```
Out[19]:
```

	show_name	country	num_episodes	aired_on	original_network	rating	current_overall_rank	lifetime_popularity_rank	watchers
0	A Korean Odyssey	South Korea	16	Friday, Saturday	tvN	8.9	33.0	1	111706.0
1	A Korean Odyssey	South Korea	16	Friday, Saturday	jTBC	8.7	89.0	2	100950.0
2	Descendants of the Sun	South Korea	16	Wednesday, Thursday	KBS2	8.7	77.0	3	96318.0

	show_name	country	num_episodes	aired_on	original_network	rating	current_overall_rank	lifetime_popularity_rank	watchers
3	Boys Over Flowers	South Korea	25	Monday, Tuesday	KBS2	7.7	2249.0	4	94228.0
4	W	South Korea	16	Wednesday, Thursday	MBC	8.5	201.0	5	92121.0
...
95	Shut Up: Flower Boy Band	South Korea	16	Monday, Tuesday	tvN	8.1	806.0	99	34668.0
96	Blood	South Korea	20	Monday, Tuesday	KBS2	7.4	3271.0	100	34666.0
97	Chicago Typewriter	South Korea	16	Friday, Saturday	tvN	8.8	51.0	101	46963.0
98	Sungkyunkwan Scandal	South Korea	20	Monday, Tuesday	KBS2	8.2	605.0	102	34615.0
99	Vagabond	South Korea	16	Friday, Saturday	SBS, Netflix	8.5	238.0	103	34523.0

In []: