```
In [114]: #B Sampath Kumar Rao - 212219040014
           import pandas as pd
In [115]: df = pd.read_csv("C:\\Users\\banga\\gitremoterepo\\Ex-01_DS_Data_Cleansing\\Data_set.csv")
In [116]: df
Out[116]:
                           show_name
                                          country num_episodes
                                                                          aired_on original_network
                                                                                                   rating current_overall_rank lifetime_popularity_rank
             0
                                 NaN South Korea
                                                            16
                                                                     Friday, Saturday
                                                                                               tvN
                                                                                                     8.9
                                                                                                                        33.0
                                                                                                                                                 1 111706.0
                                                                                                                                                 2 100950.0
                                 NaN South Korea
                                                            16
                                                                     Friday, Saturday
                                                                                             jTBC
                                                                                                     8.7
                                                                                                                        89.0
                  Descendants of the Sun South Korea
                                                            16 Wednesday, Thursday
                                                                                             KBS2
                                                                                                     8.7
                                                                                                                        77.0
                                                                                                                                                 3
                                                                                                                                                    96318.0
                      Boys Over Flowers South Korea
                                                                                             KBS2
                                                                                                                                                    94228.0
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                                                            25
                                                                    Monday, Tuesday
                                                                                                     7.7
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                                   W South Korea
                                                            16 Wednesday, Thursday
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                                                                                                                       201.0
                                                                                                                                                    92121.0
               Shut Up: Flower Boy Band South Korea
                                                            16
                                                                                                     8.1
                                                                                                                       806.0
                                                                                                                                                    34668.0
            95
                                                                    Monday, Tuesday
                                                                                               tvN
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            96
                                Blood South Korea
                                                            20
                                                                    Monday, Tuesday
                                                                                             KBS2
                                                                                                     7.4
                                                                                                                      3271.0
                                                                                                                                               100
                                                                                                                                                    34666.0
            97
                      Chicago Typewriter South Korea
                                                            16
                                                                     Friday, Saturday
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                                                                                                     8.8
                                                                                                                        51.0
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                  Sungkyunkwan Scandal South Korea
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                                                                    Monday, Tuesday
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                                                                                                                                               102
                                                                                                                                                    34615.0
            99
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                                                                                        SBS, Netflix
                                                                                                                       238.0
                                                                                                                                               103
                                                                                                                                                    34523.0
                             Vagabond South Korea
                                                                     Friday, Saturday
                                                                                                     8.5
           100 rows × 9 columns
In [117]: df.isnull().sum()
Out[117]: show_name
                                           4
                                           0
           country
                                           0
           num episodes
           aired_on
                                          1
           original_network
                                          1
           rating
                                           4
                                           3
           current_overall_rank
           lifetime_popularity_rank
                                           0
           watchers
                                           3
           dtype: int64
In [118]: df['show_name']=df['show_name'].fillna(df['show_name'].mode()[0])
```

```
In [119]: df
Out[119]:
                            show_name
                                            country num_episodes
                                                                             aired_on original_network
                                                                                                       rating current_overall_rank lifetime_popularity_rank
             0
                                                                                                                                                         111706.0
                                                                                                  tvN
                                                                                                         8.9
                       A Korean Odyssey
                                       South Korea
                                                               16
                                                                        Friday, Saturday
                                                                                                                            33.0
                                                               16
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                                                                                                         8.7
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                       A Korean Odyssey South Korea
                                                                        Friday, Saturday
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                   Descendants of the Sun South Korea
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                       Boys Over Flowers South Korea
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                                        South Korea
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                Shut Up: Flower Boy Band South Korea
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                                 Blood South Korea
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                                                                      Monday, Tuesday
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                       Chicago Typewriter South Korea
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                   Sungkyunkwan Scandal
                                        South Korea
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                              Vagabond South Korea
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                                                                        Friday, Saturday
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                                                                                                                            238.0
                                                                                                                                                    103
                                                                                                                                                          34523.0
            100 rows × 9 columns
In [120]: df.isnull().sum()
Out[120]: show_name
                                            0
                                            0
            country
                                            0
            num_episodes
            aired_on
                                            1
            original_network
            rating
                                            3
            current_overall_rank
            lifetime_popularity_rank
                                            0
            watchers
                                            3
            dtype: int64
In [121]: df.describe()
Out[121]:
                    num_episodes
                                      rating current_overall_rank lifetime_popularity_rank
                                                                                            watchers
                       100.000000 96.000000
                                                      97.000000
                                                                                           97.000000
            count
                                                                            100.000000
                                   8.293750
                                                     731.247423
                                                                             51.650000
                                                                                        52994.907216
             mean
                        18.980000
               std
                         6.846041
                                   0.424714
                                                     857.597007
                                                                             30.133164
                                                                                        17551.028458
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                                                                                        34523.000000
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                        16.000000
                                   8.100000
                                                     194.000000
                                                                             25.750000
              50%
                        16.000000
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                                                     441.000000
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              75%
                        20.000000
                                   8.600000
                                                     806.000000
                                                                             77.250000 63140.000000
              max
                        50.000000
                                   9.100000
                                                    3788.000000
                                                                            103.000000 111706.000000
In [122]: df['aired on']=df['aired on'].fillna(df['aired on'].mode()[0])
```

```
In [123]: df.isnull().sum()
Out[123]: show_name
                                      0
                                      0
          country
          num_episodes
                                      0
                                      0
          aired_on
                                      1
          original_network
          rating
          current_overall_rank
                                      3
          lifetime_popularity_rank
                                      0
          watchers
                                      3
          dtype: int64
In [124]: df['original_network']-df['original_network'].fillna(df['original_network'].mode()[0])
In [125]: df.isnull().sum()
Out[125]: show_name
                                      0
                                      0
          country
                                      0
          num_episodes
          aired_on
          original_network
                                      0
          rating
                                      3
          current_overall_rank
          lifetime_popularity_rank
                                      0
          watchers
                                      3
          dtype: int64
In [126]: df['rating']=df['rating'].fillna(df['rating'].mean())
In [127]: df.isnull().sum()
Out[127]: show_name
                                      0
                                      0
          country
                                      0
          num_episodes
          aired_on
                                      0
          original_network
                                      0
          rating
                                      0
                                      3
          current_overall_rank
          lifetime_popularity_rank
                                      0
          watchers
          dtype: int64
In [128]: df['current_overall_rank']=df['current_overall_rank'].fillna(df['current_overall_rank'].median())
In [129]: df.isnull().sum()
Out[129]: show_name
                                      0
                                      0
          country
                                      0
          num_episodes
          aired_on
                                      0
                                      0
          original_network
                                      0
          rating
                                      0
          current_overall_rank
          lifetime_popularity_rank
                                      0
                                      3
          watchers
          dtype: int64
```

```
In [130]: df['rating']=df['rating'].fillna(df['rating'].mode()[0])
In [131]: df.isnull().sum()
Out[131]: show_name
                                           0
                                           0
           country
           num_episodes
                                           0
           aired_on
                                           0
           original_network
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                                           0
           rating
                                           0
           current_overall_rank
           lifetime popularity rank
                                           0
           watchers
                                           3
           dtype: int64
In [132]: df['watchers']=df['watchers'].fillna(df['watchers'].median())
In [133]: df.isnull().sum()
Out[133]: show_name
                                           0
           country
                                           0
                                           0
           num_episodes
           aired_on
                                           0
           original_network
           rating
                                           0
           current_overall_rank
                                           0
           lifetime_popularity_rank
                                           0
           watchers
                                           0
           dtype: int64
In [134]: df
Out[134]:
                          show_name
                                          country num_episodes
                                                                          aired_on original_network rating current_overall_rank lifetime_popularity_rank watchers
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                      A Korean Odyssey
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                      A Korean Odyssey South Korea
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                  Descendants of the Sun South Korea
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                      Boys Over Flowers South Korea
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                Shut Up: Flower Boy Band South Korea
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                                Blood South Korea
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                      Chicago Typewriter South Korea
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                  Sungkyunkwan Scandal South Korea
                                                                    Monday, Tuesday
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            99
                             Vagabond South Korea
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                                                                     Friday, Saturday
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100 rows × 9 columns