**Ex 1 : Drinking water analysis, monitoring and forecasting**

Using the dataset
https://raw.githubusercontent.com/jbrownlee/Datasets/master/yearly-water-usage.csv, which consists of annual water consumption in Baltimore from 1885 to 1963( unit used is liters per capita per day), perform SMA, Holt- Winter filtering, MannKendall and ts2df. View the output in R and visualize the output. Use the required libraries and perform the following :

1. Install necessary libraries like Kendall, wql, etc.

2. Import Dataset

3. Plot data as time series

4. Plot logarithmic time series

5. Plot SMA(Simple Moving Average) and view the time series output

6. Use Holt - Winters filtering and view the time series output

7. Forecast based on Holt - Winters

8. Calculate Mann-Kendall test of trend on time series and visualize the output

9. Perform decomposition of Additive time series

10. Plot decomposition of Additive time series

11. Convert time series to dataframe using ts2df.