

## **Practical-1**

For a given dataset of the US Population (in millions), perform the following tasks in the R environment:

- (a) Entered the data into an Excel file.
- (b) Import the data from the Excel file into the R working directory.
- (c) Call the suitable package from the R library for time series analysis.
- (d) Convert the dataset into a time series object and explain the nature of the data in terms of its sampling frequency.
- (e) Plot the data and identify the dominating component(s) in the data set.

[Data: 3929214, 5308483, 7239881, 9638453, 12860702, 17063353, 23191876, 31443321, 38558371, 50189209, 62979666, 76212168, 92228496, 106021537, 123202624, 132164569, 151325798, 179323175, 203302031, 226542203, 248709873]

## **Practical-2**

The “Nottem” dataset is available in the R library and contains historical time series observations. Using this dataset, perform the following tasks:

- (a) Write the R command to load the library in which the “Nottem” dataset is available.
- (b) Write the R command to load the “Nottem” dataset into the R working environment.
- (c) Write the appropriate R command to view the description of the dataset and briefly explain the key characteristics of the data.
- (d) Explain the nature of the data in terms of its sampling frequency.
- (e) Plot the time series data and write your observations about the pattern of the data.