

## Summary

In the world calendars are classified into three categories, solar, lunar, and lunisolar, based on motions of Sun, Moon, and both, respectively. The lunisolar Vedic Hindu calendars are capable of considering both solar and lunar activities. Time series analysis plays a very important role in day-to-day applications like health, finance, environment and many more and it is also one of the major components in the field of data science. The time-series analysis processes cleaning, imputation, or forecasting are the procedures that demand the historic time series and are evaluated in many different ways. The solar calendar is based on the relative behavior of the Sun and Earth. The Vedic Hindu calendar is based on the motion of both Sun and the Moon. These calendars are solar year long, which is the time taken by earth to revolve around the Sun as well as the months are lunar, which is the time taken by the Moon around the earth. There are several different phenomena assigned with the Hindu calendar i.e. Hindu calendars are equally scientific as that of the Gregorian one. Several natural phenomenons such as lunar rhythms which are responsible for several activities in birds and animal's life, tidal effects on seas, and major climate fluctuations. There is a time series formed when we attempt to document behavioral activities of both sun and the moon in numeric format. The time-series format in the solar calendar can relate the patterns of the year. A senseless computer makes analysis easy and fast, but automatically formats the time series in the unequal length of months (30 or 31), which leads to uneven pattern sequence formations. In the Hindu calendar Days and months are based on Moon activities. The length of lunar days (known as tithis) is the time taken by the Moon to increase its longitude by 120 over the earth's longitude. Therefore, the length of a day in the Hindu calendar is not fixed as it is in the Gregorian one.

## **Future Possibilities**

Combination of both lunisolar and Gregorian calendar can give us a more powerful understanding of data and time, from where we can learn more about our earth and solar system, and people will also get to know more about Vedic Hindu calendar and prediction of various activities like birds and animal's life, tidal effects on seas, and major climate fluctuations on the earth can become high.