Practical No.7

Perform the data classification using classification algorithm.

Classification

- **Classification** is a **data mining** function that assigns items in a collection to target categories or classes.
- The goal of **classification** is to accurately predict the target class for each case in the **data**.
- For example, a **classification** model could be used to identify loan applicants as risky and safe.
- Classifier
- Prediction

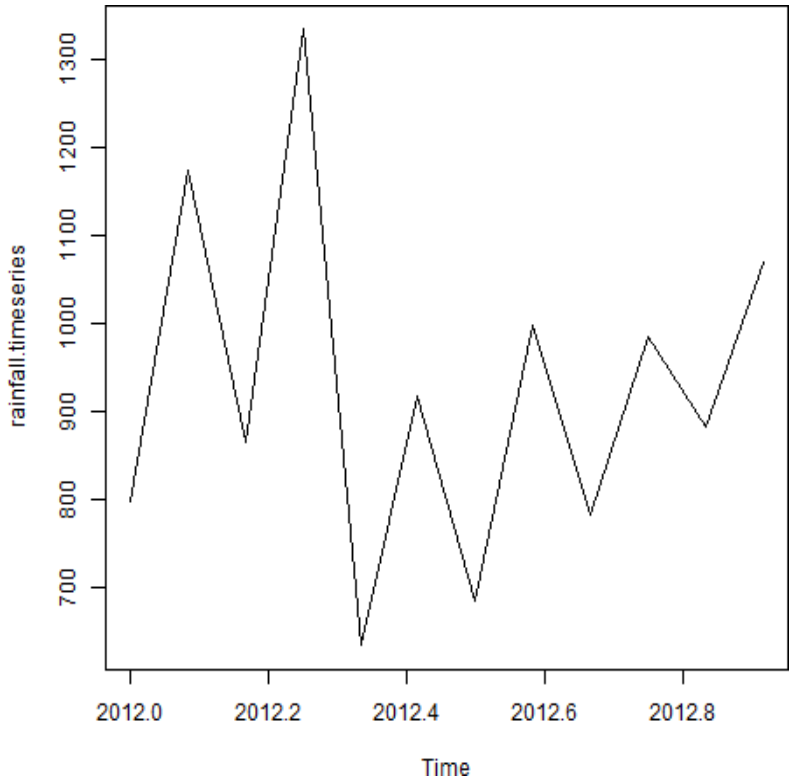
Consider the annual rainfall details at a place starting from January 2012. We create an R time series object for a period of 12 months and plot it.

```
#Consider the annual rainfall details at a place starting from January 2012.
#We create an R time series object for a period of 12 months and plot it.

rainfall <- c(799,1174.8,865.1,1334.6,635.4,918.5,685.5,998.6,784.2,985,882.8,1071)

# Convert it to a time series object.

rainfall.timeseries <- ts(rainfall,start = c(2012,1),frequency = 12)

# Print the timeseries data.

print(rainfall.timeseries)

# Give the chart file a name.

png(file = "rainfall.png")

# Plot a graph of the time series.
plot(rainfall.timeseries)


# Save the file.
dev.off()
```

Output:

When we execute the above code, it produces the following result and chart −

```
Jan      Feb      Mar      Apr      May      Jun      Jul      Aug      Sep
2012   799.0   1174.8   865.1   1334.6   635.4   918.5   685.5   998.6   784.2
         Oct      Nov      Dec
2012   985.0   882.8   1071.0
```


rainfall.timeseries
700
800
900
1000
1100
1200
1300
2012.0
2012.2
2012.4
2012.6
2012.8
Time