## 1. Read the JSON File

The JSON file is read by R using the function from **JSON()**. It is stored as a list in R.

```
# Load the package required to read JSON files.
library("rjson")

# Give the input file name to the function.
result <- fromJSON(file = "input.json")

# Print the result.
print(result)</pre>
```

When we execute the above code, it produces the following result –

```
$ID
[1] "1" "2" "3" "4" "5" "6" "7" "8"

$Name
[1] "Rick" "Dan" "Michelle" "Ryan" "Gary" "Nina"

$Salary
[1] "623.3" "515.2" "611" "729" "843.25" "578" "632.8" "722.5"

$StartDate
[1] "1/1/2012" "9/23/2013" "11/15/2014" "5/11/2014" "3/27/2015"

"5/21/2013" "6/17/2014"

$Dept
[1] "IT" "Operations" "IT" "HR" "Finance" "IT"
```

## **Convert JSON to a Data Frame**

We can convert the extracted data above to a R data frame for further analysis using the **as.data.frame()** function.

```
# Load the package required to read JSON files.
library("rjson")
```

```
# Give the input file name to the function.
result <- fromJSON(file = "input.json")

# Convert JSON file to a data frame.
json_data_frame <- as.data.frame(result)

print(json_data_frame)</pre>
```

When we execute the above code, it produces the following result –

```
salary,
     id,
                             start_date,
                                             dept
           name,
      1
           Rick
                   623.30
                             2012-01-01
                                            ΙT
2
      2
           Dan
                    515.20
                             2013-09-23
                                             Operations
3
      3
           Michelle 611.00
                             2014-11-15
                                            ΙT
4
                   729.00
                             2014-05-11
                                            HR
           Ryan
5
                    843.25
                             2015-03-27
                                            Finance
     NA
           Gary
6
           Nina
                    578.00
                             2013-05-21
      6
                                            ΙT
7
      7
           Simon
                    632.80
                             2013-07-30
                                             Operations
           Guru
                   722.50
                             2014-06-17
                                             Finance
```

```
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                                                         > # Give the input file name to the function.
> result <- fromJSON(file = "input.json")</pre>
       install.packages("rjson")
    3 # Load the package required to read JSON files.
4 library("rjson")
                                                         > # Print the result.
       Give the input file name to the function.
                                                         > print(result)
                                                         $ID
      result <- fromJSON(file = "input.json")</pre>
                                                         [1] "1" "2" "3" "4" "5" "6" "7" "8"
    9 print(result)
                                                                                    "Michelle" "Ryan"
                                                         [1] "Rick"
                                                                        "Dan"
                                                                                                          "Gary"
                                                                                                                     "Nina"
      json_data_frame <- as.data.frame(result)</pre>
                                                         [8] "Guru"
   12 print(json_data_frame)
                                                         $5alary
[1] "623.3" "515.2" "611" "729" "843.25" "578"
                                                                                                                    "632.8" "722
                                                         $StartDate
                                                         [1] "1/1/2012" "9/23/2013" "11/15/2014" "5/11/2014" "3/27/2015" "
[7] "7/30/2013" "6/17/2014"
                                                         [1] "IT" "Operation
[7] "Operations" "Finance"
                                                                         "Operations" "IT"
                                                                                                     "HR"
                                                                                                                  "Finance"
                                                         > # Convert JSON file to a data frame.
> json_data_frame <- as.data.frame(result)</pre>
                                                                  Name Salary StartDate
Rick 623.3 1/1/2012
                                                                                                Dept
                                                                   Dan 515.2 9/23/2013 Operations
                                                           3 Michelle 611 11/15/2014
4 Ryan 729 5/11/2014
                                                                                                 HR
                                                                  Gary 843.25 3/27/2015
                                                                                             Finance
                                                                  Nina 578 5/21/2013
                                                                                                 IT
                                                                Simon 632.8 7/30/2013 Operations
                                                                Guru 722.5 6/17/2014 Finance
 > js<-'[{"name": null, "release_date_local": null, "title": "3 (2011)",
 + "opening_weekend_take": 1234, "year": 2011,
+ "release_date_wide": "2011-09-16", "gross": 59954}]'
 > js <- fromJSON(js)</pre>
   js <- lapply(js, function(x) {</pre>
     x[sapply(x, is.null)] <- NA
      unlist(x)
 > do.call("rbind", js)
        name release_date_local title
                                                              opening_weekend_take year
                                             "3 (2011)" "1234"
                                                                                                "2011"
 [1,] NA NA
        release_date_wide gross
                                    "59954"
 [1,] "2011-09-16"
```

```
31 V<-1:4000
32 printV
33 print(V)
34 V<-seq(1:100)
35 print(V)
36 tapply(V,cut(V,60))
37 [55] 33 34 34 35 36 36 37 37 38 39 39 40 40 41 42 42 43 44 44 45 45 46 47 47 48 48 49 [82] 50 50 51 51 52 53 53 54 54 55 56 56 57 57 58 59 59 60 60
```