Problem	Solutions
1. Read multiple JSON files into a directory to convert into a dataset. I have files text1, text2, text3 in the directory JSON.	**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)
```

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"
"Simon"    "Guru"

$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"
   "7/30/2013"  "6/17/2014"

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

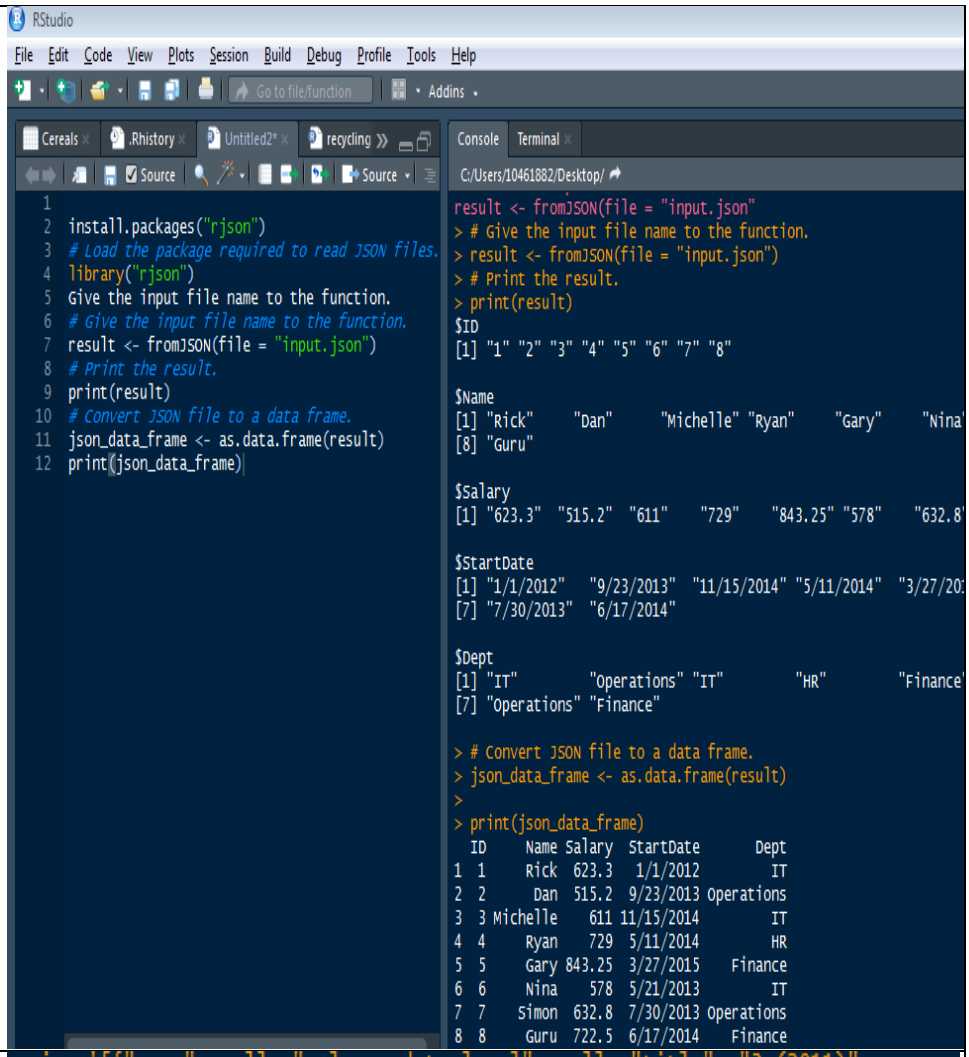
Convert JSON to a Data Frame

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)
```

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

```
      id,   name,    salary,   start_date,     dept
1      1    Rick     623.30    2012-01-01      IT
2      2    Dan      515.20    2013-09-23      Operations
3      3    Michelle 611.00    2014-11-15      IT
4      4    Ryan     729.00    2014-05-11      HR
5     NA    Gary     843.25    2015-03-27      Finance
6      6    Nina     578.00    2013-05-21      IT
7      7    Simon    632.80    2013-07-30      Operations
8      8    Guru     722.50    2014-06-17      Finance
```



2. Parse the following JSON into a data frame.

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<-'[{"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)
> js <- lapply(js, function(x) {
+   x[sapply(x, is.null)] <- NA
+   unlist(x)
+ })
> do.call("rbind", js)
     name release_date_local title      opening_weekend_take year
[1,] NA   NA                 "3 (2011)" "1234"              "2011"
     release_date_wide gross
[1,] "2011-09-16"      "59954"
>
```

3. Write a script for Variable Binning using R.	31 V<-1:4000 32 printv 33 print(v) 34 V<-seq(1:100) 35 print(v) 36 tapply(v,cut(v,60)) 37	> >tapply(v,cut(v,60)) Error: unexpected '>' in ">" > tapply(v,cut(v,60)) [1] 1 1 2 2 3 4 4 5 5 6 7 7 8 8 9 10 10 11 11 12 13 13 14 14 15 16 16 [28] 17 17 18 19 19 20 20 21 22 22 23 24 24 25 25 26 27 27 28 28 29 30 30 31 31 32 33 [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