Loading required packages to access to data from SQL tables to R

```
library(RMySQL)
```

```
## Loading required package: DBI
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(dbplyr)
```

```
##
## Attaching package: 'dbplyr'
```

```
## The following objects are masked from 'package:dplyr':
##
##     ident, sql
```

```
library(httr)

## Connect to Local MYSQL database

rdfl <- DBI::dbConnect(RMySQL::MySQL(), dbname = "ratemovie", user="root", password="root")

## Database Info
src_dbi(rdfl)
```

```
## src:  mysql 5.7.21-log [root@localhost:/ratemovie]
## tbls: movie, review_rate
```

```
## Read Movie Table

movie <- tbl(rdfl, sql("SELECT ID, movie FROM movie"))

##Review Rating & Reviewer Table

review_rate <- tbl(rdfl, sql("SELECT ID, Reviewer,Rating FROM review_rate"))

##Join Movie table & Review_)Rate table

movie_rating <- tbl(rdfl, sql("SELECT a.Reviewer, a.Rating, b.movie FROM review_rate a JOIN movie b ON a

## Reading joined table in R as Data Frame
movie_rating_df <- as.data.frame(movie_rating)


## Dimension of new combined data frame in R
```

```
dim(movie_rating_df)
```

```
## [1] 30  3
```

```
##output combined data table in R
movie_rating_df
```

```
##    Reviewer Rating                movie
## 1      Wife      5           Jungle book
## 2  Daughter      3           Jungle book
## 3  Friend 1      4           Jungle book
## 4  Friend 2      4           Jungle book
## 5  Friend 3      5           Jungle book
## 6      Wife      4                Trools
## 7  Daughter      5                Trools
## 8  Friend 1      5                Trools
## 9  Friend 2      4                Trools
## 10 Friend 3      5                Trools
## 11     Wife      3          Wonder woman
## 12 Daughter      3          Wonder woman
## 13 Friend 1      3          Wonder woman
## 14 Friend 2      4          Wonder woman
## 15 Friend 3      3          Wonder woman
## 16     Wife      5            spider man
## 17 Daughter      3            spider man
## 18 Friend 1      4            spider man
## 19 Friend 2      4            spider man
## 20 Friend 3      3            spider man
## 21     Wife      3 Beauty and the beast
## 22 Daughter      2 Beauty and the beast
## 23 Friend 1      4 Beauty and the beast
## 24 Friend 2      5 Beauty and the beast
## 25 Friend 3      3 Beauty and the beast
## 26     Wife      4            Cinderella
## 27 Daughter      2            Cinderella
## 28 Friend 1      1            Cinderella
## 29 Friend 2      4            Cinderella
## 30 Friend 3      3            Cinderella
```

```
##Query to find out average rating of movies

sql <- "SELECT Movie.Movie,AVG(review_rate.rating)
FROM review_rate
INNER JOIN Movie ON (Movie.ID = review_rate.ID)
GROUP BY Movie"
theAVGReviewMovie <- suppressWarnings(dbGetQuery(rdfl, sql))
print(theAVGReviewMovie)
```

```
##                   Movie AVG(review_rate.rating)
## 1 Beauty and the beast                     3.4
## 2           Cinderella                     2.8
## 3          Jungle book                     4.2
## 4           spider man                     3.8
## 5               Trools                     4.6
## 6         Wonder woman                     3.2
```

```
##Query to find out average rating of reviewer of all movies.

sql <- "SELECT review_rate.Reviewer,AVG(review_rate.Rating) FROM review_rate GROUP BY Reviewer"
theReviewerAVG <- suppressWarnings(dbGetQuery(rdfl, sql))
print(theReviewerAVG)
```

```
##   Reviewer AVG(review_rate.Rating)
## 1 Daughter                 3.0000
## 2 Friend 1                 3.5000
## 3 Friend 2                 4.1667
## 4 Friend 3                 3.6667
## 5     Wife                 4.0000
```