Assignment 3 FE513

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##2. PostgreSQL API in R (50pt) #1. Make a connection to your local PostgreSQL database using API.

```
#install.packages("RPostgres")
```

```
if(!require("RPostgres")){ # check for package existence
  install.packages("RPostgres")
}
```

```
## Loading required package: RPostgres
```

```
library("RPostgres")
```

```
# R Code
library(DBI)

# create a connection
con <- dbConnect(RPostgres::Postgres(),
                 dbname = "Assignment 3",
                 host = "localhost",
                 port = 5432,
                 user = "postgres",
                 password = '123')

# list table in database
dbListTables(con)
```

```
## [1] "banks_sec_2002" "banks_al_2002"  "banks_total"
```

#2. Import the CSV file you got from Problem 1 (banks_total) into a new table in the database using API.

```
# R Code
dbWriteTable(con, "new_banks_total", read.csv("C:/Users/shubh.SHUBHAM_5260/Downloads/Practical A
spects of Database Design/banks_total.csv"))
```

#3. Retrieve the data of table ‘new_banks_total’ using API. Count how many rows in the table.

```
# R Code
result <- dbGetQuery(con, "SELECT * FROM new_banks_total")
print(head(result))
```

```
##      id       date security  asset liability
## 1 32307 2002-09-30        0  53714     49350
## 2 22598 2002-03-31        0  57360     53205
## 3 15879 2002-06-30     5357  76960     62945
## 4 35373 2002-06-30        0  46551     38721
## 5  5226 2002-09-30     7960  53873     48146
## 6 22092 2002-12-31        0 147828    135596
```

```
num_rows <- dbGetQuery(con, "SELECT COUNT(*) FROM new_banks_total")$count

print(num_rows)
```

```
## integer64
## [1] 37816
```