window functions

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```
# Load the package into R
library(RMySQL)
library(DBI)

# Connect to your MySQL database
con <- dbConnect(MySQL(),
                 host = "localhost",
                 user = "root",
                 password = "Alex9297248844",
                 dbname = "windows_functions")
```

retrieve the data

```
df <- dbGetQuery(con, "SELECT * FROM prices")
```

```
head(df,10)
```

```
##    id    item       date price
## 1   1 Guitar  2023-01-01 150.0
## 2   2 Guitar  2023-01-02  50.0
## 3   3 Guitar  2023-01-03 101.5
## 4   4 Guitar  2023-01-04  99.0
## 5   5  Guitar 2023-01-05 300.0
## 6   6    Drum 2023-01-01 500.0
## 7   7    Drum 2023-01-02 198.0
## 8   8    Drum 2023-01-03 250.0
## 9   9    Drum 2023-01-04 205.0
## 10 10    Drum 2023-01-05 210.0
```

i used the window functions in mySQL to calculate the year-to-date average and the six-day moving averages for each item.

here what i got

```
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con <- dbConnect(MySQL(),
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                 dbname = "windows_functions")
```

Retrive the data

```
df2 <- dbGetQuery(con, "SELECT * FROM price_averages")
```

```
head(df2 , 10)
```

```
##    id    item       date price year_to_date_avg six_day_moving_avg
## 1   1    Drum 2023-01-01 500.0           500.00              500.00
## 2   2    Drum 2023-01-02 198.0           349.00              349.00
## 3   3    Drum 2023-01-03 250.0           316.00              316.00
## 4   4    Drum 2023-01-04 205.0           288.25              288.25
## 5   5    Drum 2023-01-05 210.0           272.60              272.60
## 6   6  Guitar 2023-01-05 300.0           300.00              300.00
## 7   7 Guitar  2023-01-01 150.0           150.00              150.00
## 8   8 Guitar  2023-01-02  50.0           100.00              100.00
## 9   9 Guitar  2023-01-03 101.5           100.50              100.50
## 10 10 Guitar  2023-01-04  99.0           100.13              100.13
```

Disconnect from the database

```
dbDisconnect(con)
```

```
## [1] TRUE
```