

Tonight:

R and SQL

- •Where should the work be done?
- How should I connect my (R) client to the database (native drivers or ODBC or ORM)
- Demo: sample RMySQL beach head

Review your assignment 2 solutions!

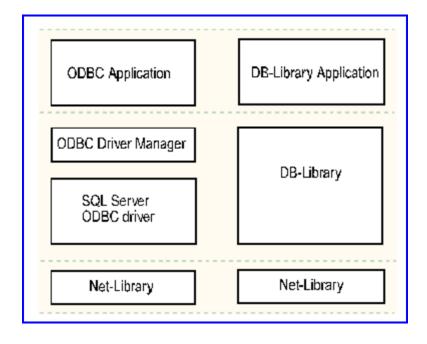
Where should the data processing work be done?

Can it / should it be done all in SQL?
Can it / should it be done all in R?
If you are going to use both SQL and R...
how should you connect your SQL to your R?

- File handoff
- Programmatic connection

Often, the data scientist will not have direct access to the SQL data for security reasons.

Native Drivers vs. ODBC



RMySQL Beachhead

```
library(RMySQL)
drv <- dbDriver("MySQL")</pre>
con <- dbConnect(drv, user="root", password =
"Kasparov", dbname = "flights",
                  host = "local host")
dbListTables(con)
dbListFields(con, "weather")
query <- "SELECT year, month, MAX(wind_speed)</pre>
    AS maxwind FROM weather GROUP BY year, month; "
max_wind <- dbGetQuery(con, query)</pre>
```

Your Assignment 2 solutions