Econ 294 Final Exam

WenhanZeng, ID:1504976 2016-03-16

Preperation

Load required packages.

```
library(foreign)
library(ggplot2)
library(knitr)
library(nycflights13)
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(tidyr)
library(RSQLite)
## Loading required package: DBI
Part a)
```

require data from database

```
my_db<- src_sqlite("nycflights13.sqlite", create = T)
flights_sqlite <- copy_to(
    my_db, flights, temporary = FALSE,
    indexes = list(
        c("year", "month", "day"),
        "carrier",
        "tailnum")
)
flights<-collect(flights_sqlite)
airlines_sqlite <- copy_to(
    my_db, airlines, temporary = FALSE,
    indexes = list("carrier")</pre>
```

```
airlines<-collect(airlines_sqlite)
airports_sqlite <- copy_to(
    my_db, airports, temporary = FALSE,
    indexes = list("faa")
)
airports<-collect(airports_sqlite)

planes_sqlite <- copy_to(
    my_db, planes, temporary = FALSE,
    indexes = list("tailnum")
)
planes<-collect(planes_sqlite)

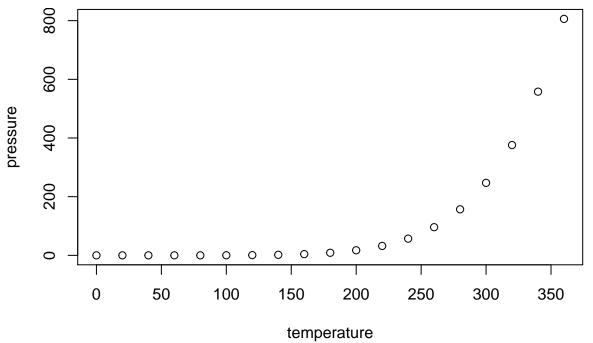
weather_sqlite <- copy_to(
    my_db, weather, temporary = FALSE,
    indexes = list(
        c("year", "month", "day", "hour"),
        "origin")
)
weather<-collect(weather_sqlite)</pre>
```

Part b)

part c)

Part d)

You can also embed plots, for example:



Note that the \mbox{echo} = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.