Exercises

- 1. (1) Using the **plot** function, draw a graph of log (brain) versus log (body) for the data set **Animals** from the MASS package. Label the animal names appropriately.
- (2) Using the **ggplot** function, draw a graph as shown in 1(1).

Answer 1:

2. The following table contains a data set on caffeine consumption by martial status among women giving birth. Plot a barplot of Caffeine Consumption against Martial State.

[Data source]

D. G. Altman, Practical Statistics for Medical Research (Chapman & Hall, London, 1991)

	Caffeine consumption			
Martial state	0	1-150	151-300	>300
Married	652	1537	598	242
Prev.married	36	46	38	21
Single	218	327	106	67

Answer 2.

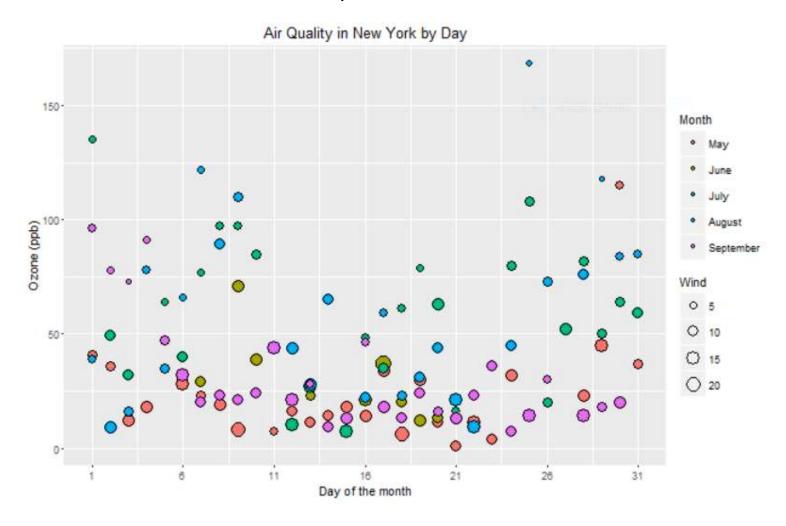
3. Using the **ggplot** function, draw a tabular histogram for Sepal.Length of the iris data set. Change colors according to the Species.

```
library(ggplot2)
ggplot(iris,aes(x=Sepal.Length, fill=Species)) +
  geom_histogram(color="black") +
  facet_grid(Species~.)
```

4. The following exercises relate to the data frame **airquality** in the datasets packaUsing the **ggplot** function, draw a bubble chart for Day versus Ozone as follows.

Change color and bubble size by Month and Wind, respectively.

Use $scale_x_continuous(breaks = seq(1, 31, 5))$.



[Ref.] http://t-redactyl.io/blog/2016/02/creating-plots-in-r-using-ggplot2-part-6-weighted-scatterplots.html