

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 marital status among women giving birth. Plot a barplot of Caffeine Consumption against Marital State.

[Data source]

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

Marital state	Caffeine consumption			
	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 package. Using 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))`.

