> animals <- read.table("~/Desktop/animals.txt", header=TRUE, quote="\"")

> View(animals)

> summary(animals)

animal body brain

African elephant: 1 Min. : 0.02 Min. : 0.4

Asian elephant : 1 1st Qu.: 5.05 1st Qu.: 53.0

Brachiosaurus : 1 Median : 55.50 Median : 157.0

Cat : 1 Mean : 4436.89 Mean : 612.7

Chimpanzee : 1 3rd Qu.: 493.00 3rd Qu.: 431.5

Cow : 1 Max. :87000.00 Max. :5712.0

(Other) :21

> var(animals$brain)

[1] 1824576

> mean(animals$brain)

[1] 612.6519

> sd(animals$brain)

[1] 1350.769

> boxplot(animals$brain)

> hist(animals$brain)

> quantile(animals$brain)

0% 25% 50% 75% 100%

0.4 53.0 157.0 431.5 5712.0

> plot(animals)

> plot(animals$body,animals$brain)

> plot(animals$body,animals$brain,xlab=body size kilograms,ylab=brain size grams)

错误: 意外的符号 in "plot(animals$body,animals$brain,xlab=body size"

> plot(animals$body,animals$brain,xlab="body size kilograms",ylab="brain size grams")

> plot(animals$body,animals$brain,xlab="body size (kilograms)",ylab="brain size (grams)",col="blue",pch=19,main="Scatterplot of Brainsize and Bodysize")

> plot(log(animals$body),log(animals$brain),xlab="body size (kilograms)",ylab="brain size (grams)",col="blue",pch=19,main="Scatterplot of Brainsize and Bodysize")

> animals$newbrain=log(animals$brain)

> animals$newbody=log(animals$body)

> fit=lm(animals$newbody~animals$newbrain)

> fit$coefficients

(Intercept) animals$newbrain

-1.430369 1.142700

> fit$coef

(Intercept) animals$newbrain

-1.430369 1.142700

> fit$coef[1]

(Intercept)

-1.430369

> abline(fit$coef[1],fit$coef[2],col="red")