library(foreign)  # load a package - used to read in foreign datasets like sp
getwd()  # Check your current working directory
setwd("C:/Documents and Settings/Rick/Desktop")  # set working directory
ourdata<-read.csv("Kruglanski data.csv")  # read in the CSV datafile
ourdata  # will print out dataset
class(ourdata)  # used to figure out object type
str(ourdata)  # gives us the structure of the data frame

# Can look at segments of the data frame
ourdata[1:2,]
ourdata[,1:2]
ourdata[1,1]
ourdata$assess12

# Make new variables
ourdata$temp <- ourdata$assess12 - 50.8
#can operate on the data without refering to the data frame each time
attach(ourdata)
ourdata$temp2 <- temp/4
detach(ourdata)

#can select subsets of the data to operate upon
locodata <- ourdata[,3:14]

# get summary data on dataset
summary(locedata)

# compute means and sds for each variable - uses apply function
?apply
apply(locodata,2,mean)  # 2 is the argument to compute means by columns
apply(locodata,2,sd)  # Computer standard deviations

# can center and standardize variables
?scale
z.loco <- scale(locodata)  #default is to center and standardize (z-score)
apply(z.loco,2,mean)  # 2 is the argument to compute means by columns

#Compute a covariance or correlation matrix
cor(z.loco)
cor(locodata)

cov(z.loco)
cov(locodata)

#Plot some data
hist(locodata$loco1)
loco.first <- apply(locodata[,1:5],1,sum)
loco.scd  <-  apply(locodata[,5:10],1,sum)
plot(loco.first,loco.scd)

par(mfrow=c(1,2))  # break the graphics window up into 1 row and 2 columns
hist(locodata$loco1)
plot(loco.first,loco.scd)