Confidence interval:

95% confidence interval calculations

**(−1.96<(𝑋−𝜇)/sqrt(25/100)<1.96)=0.95**

R CODE GNQ:

if (any(x > 8)) print("yes")

ifelse (any(x > 88),"yes","no") ## na.rm = TRUE

pow<-function(x,y){return(x^y)} # ^ is used for power instead of \*\* (as in python)

### creating random data ##########

V<-sample(1:10000,100) # To create a numeric vector with 100 numbers randomly

sample <- rnorm(n = 10000, mean = 55, sd = 4.5)

################## for skewness and kurtosis import library moments ##################

library(moments)

kurtosis(sample) #If kurtosis < 3 its platykurtic #negative kutosis,#If kurtosis~~3= indicates normal distribution #mesokurtic, #If kurtosis > 3 its leptokurtic #positive kurtosis

########## reading and writing excel files ###############

install.packages("XLConnect")

library(rJava)

require(XLConnect) #library(XLConnect) # To load an add-on package

writeWorksheetToFile(file = "carsdata.xls", data = mtcars, sheet = "Sheet1")

wb<-loadWorkbook("carsdata.xlsx")

data<-readWorksheet(wb,"Sheet1",header=T)

############### plots ###############################

|  |  |
| --- | --- |
| pos | a position specifier for the text. If specified this overrides any adj value given. Values of 1, 2, 3 and 4, respectively indicate positions below, to the left of, above and to the right of the specified coordinates. |
| pos | position relative to location. 1=below, 2=left, 3=above, 4=right. If you specifypos, you can specify offset= in percent of character width. |

Cex we can give size of the text

<http://www.statmethods.net/advgraphs/axes.html>

<http://www.ats.ucla.edu/stat/r/faq/barplotplus.htm>

text(bp, 0, round(r, 1),cex=1.5,pos=3, col="white")

r=c(Switched,Stay)

bp=barplot(r,names.arg=c("Switch","Stay"),col=c("darkblue","red"), main="The better choice")