Ex1: eda

age <- c(35, 65, 49, 30, 20, 40, 90, 54, 78, 45)

systolic\_pressure <- c(122, 120, 120, 115, 130, 131, 118, 122, 120, 115)

diastolic\_pressure <- c(83, 79, 78, 72, 90, 90, 82, 80, 82, 75)

calculate\_stats <- function(data) {

n <- length(data)

min\_val <- min(data)

max\_val <- max(data)

median\_val <- median(data)

mean\_val <- mean(data)

variance\_val <- var(data)

sd\_val <- sd(data)

return(c(n, min\_val, max\_val, median\_val, mean\_val, variance\_val, sd\_val))

}

age\_stats <- calculate\_stats(age)

systolic\_pressure\_stats <- calculate\_stats(systolic\_pressure)

diastolic\_pressure\_stats <- calculate\_stats(diastolic\_pressure)

stats\_table <- data.frame(

Statistic = c("Number of samples", "Minimum value", "Maximum value", "Median", "Mean", "Variance", "Standard deviation"),

Age = age\_stats,

Systolic\_Pressure = systolic\_pressure\_stats,

Diastolic\_Pressure = diastolic\_pressure\_stats

)

print(stats\_table)

demo<- read.csv('Iris.csv')

head(demo)

tail(demo)

summary(demo)

mean(demo $Petal.Width)

hist(iris$Petal.Width,

main = "Histogram of Petal Width",

xlab = "Petal Width",

col = "lightblue",

border = "black")

versicolor\_data <- subset(iris, Species == "versicolor")

vir\_petal<- sd(virginica\_data$Petal.Width)

print(versi\_petal)

setosa\_data <- subset(iris, Species == "setosa")

virginica\_data <- subset(iris, Species == "virginic")

results <- data.frame(

Statistic = c(

"mean", "median",

"Variance", "Standard deviation"

),

versi= c( versi\_petal

),

setosa = c(

setosa\_petal

),

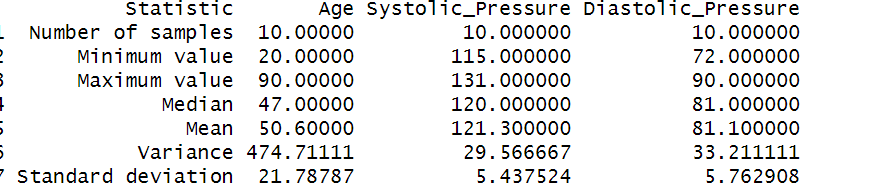
virginica = c(vir\_petal)

)

# Printing the results

print(results)

qn1.



qn2.

