# ICA #9

# Instruction: Submit your solutions as a Word or PDF file on Canvas

# Part I. R Basics

# 1. Compute 34 \* 21

# Write your code below:

34\*21

# 2. Assign string "Chris" to variable 'name'

# Write your code below:

name = "Chris"

# 3. Assign logarithm of two to variable 'log\_two'

# Hint: use log() function

# Write your code below:

log\_two = log(2)

# Part II. Data Pre-processing in R

# 4. Install "psych" package

# Hint: Use install.packages() function

# Write your code below:

install.packages("psych")

# 5. Load "psych" package you installed in the previous question

# Hint: Use library() or require() function

# Write your code below:

require(psych)

# 6. Download "Sales.csv" data file from Community website, import it into variable 'salesData'

# Write your code below:

# Hint: 1) Save the file to the same folder where you saved the source code

# 2) Click menu Session>Set Working Directory> To Source File Location

# 3) Use read.csv() function

# Write your code below:

salesData<- read.csv("Sales.csv")

# 7. Summarize sales data. What is the mean value of "Amount"?

# Hint: Use summary() function

# Write your code below:

summary(salesData$Amount)

# mean value of Amount is

1118.8

# 8. What is the mean value of "Amount" by country?

# Hint: Use describeBy() function

# Write your code below:

describeBy(salesData$Amount,salesData$Country)

# answer is

UK: 1003.73

USA: 1163.53

# 9. Is "Amount" statistically different by country?

# Hint: Use t.test() function

# Write your code below:

t.test(salesData$Amount~salesData$Country)

# answer is

No.

# 10. Create a histogram of the "Amount" variable

# Hint: Use hist() function

# Write your code below:

hist(salesData$Amount)