#Please write your R codes in this file and submit it online at Canvas

#You file name should be Lastname\_Firstname HW1.R

#1. Please clear all objects in the memory

rm(list=ls())

#2. assign "Welcome to Maryville University" to a variable, message, and print it out

a<- "Welcome to Maryville University"

print(a)

#3. Generate a vector v1 containing elements: 100, 200, 1000, 5000

v1<-c(100,200,1000,500)

print(v1)

#4. Print out the type of v1

print(typeof(v1))

#5. Print out the length of v1

print(length(v1))

#6. Generate a vector v2 containing elements from 10 to 100000

v2<- c(10:100000)

print(v2)

#7. Generate a vector v3: from 100 to 1000 with step size of 0.05

v3<- seq(from=100,to=1000,by=0.05)

print(v3)

#8. Print out the length of v3

print(length(v3))

#9. Generate a vector v4: from 100 with step size of 0.001 with length of 1000000

v4<-seq(from=100,by=0.001,length=1000000)

print(v4)

#10 Generate a vector x =(1,2,3,4,5); y= (10,9,8,7,6)

# find the sum of x+y and the product of x and y

x<- c(1,2,3,4,5)

y<- c(10,9,8,7,6)

z<-x+y

print(z)

k<-x\*y

print(k)