lab1

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1. Use and show R code to find the square root of 63,504.

sqrt(63504)

## [1] 252

1. Use and show R code to log10(45000)

log10(45000)

## [1] 4.653213

1. Use and show R code to evaluate ln(23.05)

log(23.05)

## [1] 3.137666

1. Use and show R code to write all integers from 15 to 1 in decreasing order.

c <- seq(from = 15, to = 1)  
for (variable in c) {  
 print(variable)  
}

## [1] 15  
## [1] 14  
## [1] 13  
## [1] 12  
## [1] 11  
## [1] 10  
## [1] 9  
## [1] 8  
## [1] 7  
## [1] 6  
## [1] 5  
## [1] 4  
## [1] 3  
## [1] 2  
## [1] 1

1. Use and show R code to find the mean of all prime numbers 3 to 17 inclusive.

library(matlab)

##   
## Attaching package: 'matlab'

## The following object is masked from 'package:stats':  
##   
## reshape

## The following objects are masked from 'package:utils':  
##   
## find, fix

## The following object is masked from 'package:base':  
##   
## sum

c <- vector()  
for (number in 3:17) {  
 if (isprime(number)) {  
 c <- append(c, number)  
 }  
}  
  
print(c)

## [1] 3 5 7 11 13 17

print(mean(c))

## [1] 9.333333

1. Use and show R code to round 17.3838 to the nearest hundredth

round(17.3838, digits = 3)

## [1] 17.384

1. Use and show R code to find the median of the following numbers: 18,28,22,27,36,38,42,45, and 48.
2. Produce a histogram

nice\_vector <- c(18,28,22,27,36,38,42,45,48)  
  
print(median(nice\_vector))

## [1] 36

hist(nice\_vector)

