RWorksheet_Aposaga

2024-09-17

#1. Setup a vector named age age <- c(34, 28, 22, 36, 27, 18, 52, 39, 42, 29, 35, 31, 27, 22, 37, 34, 19, 20, 57, 49, 50, 37, 46, 25, 17, 37, 42, 53, 41, 51, 35, 24, 33, 41)

data_pts <- length(age) data_pts

#2. Find the reciprocal for the values of age reciprocal <- 1/age

reciprocal

#3. Assign new age assign("new_age",c(age, 0, age))

#4. Sort the values for age sort(age)

#5. Find the minimum and maximum value for age min(age) max(age)

#6. Set up a vector named data data <- c(2.4, 2.8, 2.1, 2.5, 2.4, 2.2, 2.5, 2.3, 2.5, 2.3, 2.4, 2.7) length(data)

#7. Generates a new vector for data where you double every value of the data double_data <- data*2

#8.1 Generate a sequence for the following scenarios # Integers from 1 to 100 one_to100 <- seq(1:100) one_to100

#8.2 numbers from 20 to 60 twenty_to60 <- seq(from = 20, to = 60, by = 1) twenty_to60

#8.3 Mean of numbers from 20 to 60 mean_20to60 <- mean(seq(from=20,to=60,by=1)) mean_20to60

#8.4 Sum of numbers from 51 to 91 sum_50to91 <- sum(seq(from=51, to=91, by=1)) sum_50to91

#8.5 Integers from 1 to 1,000 oneto1k <- seq(1:1000) oneto1k

#a. How many data points from 8.1 to 8.4? length(c(one_to100, twenty_to60, mean_20to60, sum_50to91))

#c. For 8.5 find only maximum data points until 10 until10 <- oneto1k[1:10] max_until10 <- max(until10)

until10 max_until10

#9. Print a vector with the integers between 1 and 100 that are not divisible by 3, 5 and 7 using filter option. filtered_num <- Filter(function(i) { all(i %% c(3,5,7) != 0) }, seq(100)) filtered_num

#10 #Generate a sequence backwards of the integers from 1 to 100 sequence <- seq(from = 1, to = 100) rev_seq <- rev(sequence)

rev_seq

#11 #List all the natural numbers below 25 that are multiples of 3 or 5. #Find the sum of these multiples. limit <- 24 below25 <- 1:(limit-1) multiples <- Filter(function(i) { any(i %% c(3,5) == 0)}, seq(24)) multi_sum <- sum(multiples) multi_sum

data_pts1011 <- length(c(rev_seq, multiples, multi_sum)) data_pts1011

#12 x <- {0 + x + 5 + }

#13 scores <- c(72, 86, 92, 63, 88, 89, 91, 92, 75, 75, 77) scores[2] scores[3]

#14 a = c(1,2,NA,4,NA,6,7) print(a,na.print="999")

#15 name = readline(prompt="Input your name:") age = readline(prompt="Input your age:") print(paste("My name is",name, "and I am",age ,"years old.")) print(R.version.string)