RWorksheet_tupaz#1

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1.

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)

length(age)

#[1] 34

2.

reciprocal_age <- 1 / age reciprocal_age

#[1] 0.02941176 0.03571429 0.04545455 0.02777778 0.03703704 0.055555560.01923077 0.02564103 #[9] 0.02380952 0.03448276 0.02857143 0.03225806 0.03703704 0.04545455 0.02702703 0.02941176 #[17] 0.05263158 0.05000000 0.01754386 0.02040816 0.02000000 0.02702703 0.02173913 0.04000000 #[25] 0.05882353 0.02702703 0.02380952 0.01886792 0.02439024 0.01960784 0.02857143 0.04166667 #[33] 0.03030303 0.02439024

3.

new_age <- c(age, 0, age) new_age

#[1] 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 #[31] 35 24 33 41 0 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 #[61] 37 42 53 41 51 35 24 33 41

4.

sorted_age <- sort(age) sorted_age

[1] 17 18 19 20 22 22 24 25 27 27 28 29 31 33 34 34 35 35 36 37 37 37 39 41 41 42 42 46 49 50

#[31] 51 52 53 57

5.

min_age <- min(age) max_age <- max(age) min_age max_age

#[1] 17 #[1] 57

6.

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)

#[1] 12

7.

doubled_data <- data * 2 doubled_data

#[1] 4.8 5.6 4.2 5.0 4.8 4.4 5.0 4.6 5.0 4.6 4.8 5.4

8.

8.1

seq_1_100 <- seq(1, 100) length(seq_1_100)

8.2

seq_20_60 <- seq(20, 60) length(seq_20_60)

8.3

mean_20_60 <- mean(seq_20_60) mean_20_60

8.4

sum_51_91 <- sum(seq(51, 91)) sum_51_91

#[1] 100 #[1] 41 #[1] 40 #[1] 2911

9.

not_divisible <- Filter(function(i) { all(i %% c(3, 5, 7) != 0) }, seq(100)) not_divisible

#[1] 1 2 4 8 11 13 16 17 19 22 23 26 29 31 32 34 37 38 41 43 44 46 47 52 53 58 59 61 62 64 #[31] 67 68 71 73 74 76 79 82 83 86 88 89 92 94 97

10.

backwards_seq <- rev(seq(1, 100)) backwards_seq

#[1] 100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 #[23] 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 #[45] 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 #[67] 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 #[89] 12 11 10 9 8 7 6 5 4 3 2 1

11.

multiples_3_5 <- seq(1, 24)[seq(1, 24) %% 3 == 0 | seq(1, 24) %% 5 == 0] sum_multiples <- sum(multiples_3_5)

length(multiples_3_5) multiples_3_5 sum_multiples

#[1] 11 #[1] 3 5 6 9 10 12 15 18 20 21 24 #[1] 143

12.

This code will produce an error due to incomplete expression.

x <- {0 + x + 5 + }

#Error: unexpected '}' in "x <- {0 + x + 5 + }"

13.

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

#[1] 86 92

14.

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

#[1] 1 2 -999 4 -999 6 7

15.

name = readline(prompt="input your name:") input your name: Lorie Mae age = readline(prompt = "Input your age:") Input your age: 18 print(paste("My name is", name, "and I am", age, "years old.")) print(R.version.string)