1. Test whether two vectors are exactly equal (element by element).

vec1 = c(rownames(mtcars[1:15,]))

vec2 = c(rownames(mtcars[11:25,]))

Ans:

> all(vec1%in%vec2)

[1] FALSE

2. Sort the character vector in ascending order and descending order.

vec1 = c(rownames(mtcars[1:15,]))

vec2 = c(rownames(mtcars[11:25,]))

Ans:

> #sorting vec1 in ascending order

> sort(vec1,,decreasing = FALSE,)

[1] "Cadillac Fleetwood" "Datsun 710" "Duster 360"

[4] "Hornet 4 Drive" "Hornet Sportabout" "Mazda RX4"

[7] "Mazda RX4 Wag" "Merc 230" "Merc 240D"

[10] "Merc 280" "Merc 280C" "Merc 450SE"

[13] "Merc 450SL" "Merc 450SLC" "Valiant"

> #sorting vec1 in descending order

> sort(vec1,,decreasing = TRUE,)

[1] "Valiant" "Merc 450SLC" "Merc 450SL"

[4] "Merc 450SE" "Merc 280C" "Merc 280"

[7] "Merc 240D" "Merc 230" "Mazda RX4 Wag"

[10] "Mazda RX4" "Hornet Sportabout" "Hornet 4 Drive"

[13] "Duster 360" "Datsun 710" "Cadillac Fleetwood"

> #sorting vec2 in ascending order

> sort(vec2,,decreasing = FALSE,)

[1] "AMC Javelin" "Cadillac Fleetwood" "Camaro Z28"

[4] "Chrysler Imperial" "Dodge Challenger" "Fiat 128"

[7] "Honda Civic" "Lincoln Continental" "Merc 280C"

[10] "Merc 450SE" "Merc 450SL" "Merc 450SLC"

[13] "Pontiac Firebird" "Toyota Corolla" "Toyota Corona"

> #sorting vec2 in descending order

> sort(vec2,,decreasing = TRUE,)

[1] "Toyota Corona" "Toyota Corolla" "Pontiac Firebird"

[4] "Merc 450SLC" "Merc 450SL" "Merc 450SE"

[7] "Merc 280C" "Lincoln Continental" "Honda Civic"

[10] "Fiat 128" "Dodge Challenger" "Chrysler Imperial"

[13] "Camaro Z28" "Cadillac Fleetwood" "AMC Javelin"

3. What is the major difference between str() and paste() show an example.

Ans:

paste0() you can not apply some sort of separator, while you do have that option with paste(), whereas a single space is the default.

str\_c(..., sep = "", collapse = NULL) is equivalent to paste(), which means you do have the option to customize your desired separator. The difference is for str\_c() the default is no separator, so it acts just like paste0() as a default.

Paste() and paste0() are both functions from the base package, whereas str\_c() comes from the stringr package.

paste("file", "number", "32")

[1] "file number 32"

paste0("file", "number", "32")

[1] "filenumber32"

str(iris)

'data.frame': 150 obs. of 5 variables:

$ Sepal.Length: num 5.1 4.9 4.7 4.6 5 5.4 4.6 5 4.4 4.9 ...

$ Sepal.Width : num 3.5 3 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 ...

$ Petal.Length: num 1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 ...

$ Petal.Width : num 0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 ...

$ Species : Factor w/ 3 levels "setosa","versicolor",..: 1 1 1 1 1 1 1 11 1 ...

4. Introduce a separator when concatenating the strings.

Ans:

> First\_Name = c("Madhavi")

> Last\_Name = c("Mulugu")

> paste("My Name is", sep="-", First\_Name, Last\_Name)

[1] "My Name is-Madhavi-Mulugu"