Session-5-Assignment-3

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# Q1. Test whether two vectors are exactly equal (element by element).  
vec1 = c(rownames(mtcars[1:15,]))  
vec2 = c(rownames(mtcars[11:25,]))  
all.equal(vec1,vec2)

## [1] "15 string mismatches"

# Q2. Sort the character vector in ascending order and descending order.  
vec1 = c(rownames(mtcars[1:15,]))  
vec2 = c(rownames(mtcars[11:25,]))  
sort(vec1)

## [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"

sort(vec1, decreasing = T)

## [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"

sort(vec2)

## [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"

sort(vec2, decreasing = T)

## [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"

# Q3. What is the major difference between str() and paste() show an example.  
str(vec1)

## chr [1:15] "Mazda RX4" "Mazda RX4 Wag" "Datsun 710" "Hornet 4 Drive" ...

paste(vec1)

## [1] "Mazda RX4" "Mazda RX4 Wag" "Datsun 710"   
## [4] "Hornet 4 Drive" "Hornet Sportabout" "Valiant"   
## [7] "Duster 360" "Merc 240D" "Merc 230"   
## [10] "Merc 280" "Merc 280C" "Merc 450SE"   
## [13] "Merc 450SL" "Merc 450SLC" "Cadillac Fleetwood"

# str() returns the value, class and number of elements whereas paste() returns the value

# Q4. Introduce a separator when concatenating the strings.  
sdata = c('a', 'b', 'c')  
paste(sdata[1], sdata[2], sdata[3], sep ='-,')

## [1] "a-,b-,c"