

ACADGILD ASSIGNMENT 5.3

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

Answer:

```
vec1 = c(rownames(mtcars[1:15,]))
vec2 = c(rownames(mtcars[11:25,]))
is.element(vec1,vec2)
[1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE TRUE
identical(vec1,vec2)
[1] TRUE
setequal(vec1,vec2)
[1] TRUE
vec1 %in% vec2
[1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE TRUE TRUE TRUE TRUE
```

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

Answer:

Sorting of vectors can be done using the `sort()` function. By default, it sorts in ascending order. To sort in descending order we can pass `decreasing=TRUE`.

```
vec1 = c(rownames(mtcars[1:15,]))
vec2 = c(rownames(mtcars[11:25,]))
sort(vec1)
```

```
sort(vec1, decreasing=TRUE)
```

```
sort(vec2)
```

```
sort(vec2, decreasing=TRUE)
```

```
order(vec1)
```

```
order(vec1, decreasing = TRUE)
```

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

Answer:

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

```
str_c(..., sep = "", collapse = NULL)
```

EXAMPLE:

```
str_c("Letter: ", letters)
```

```
str_c("Letter", letters, sep = ": ")
```

```
str_c(letters, " is for", "...")
```

```
str_c(letters[-26], " comes before ", letters[-1])
```

```
str_c(letters, collapse = "")
```

```
str_c(letters, collapse = ", ")
```

```
x <- LETTERS
```

```
x[x %in% c("A", "E", "I", "O", "U")] <- NA
```

```
y <- letters
```

```
y[c(TRUE, FALSE, FALSE)] <- NA
```

```
stringr::str_c(x, y)
```

```
paste0(x, y)
```

4. Introduce a separator when concatenating the strings

Answer:

To concatenate strings in R programming, use `paste()` function.

The syntax of `paste` function that is used to concatenate two or more strings.

`paste(..., sep="", collapse=NULL)`

`paste` is the keyword

`sep` is a character that would be appended between two adjacent strings and acts as a separator

`collapse` is an optional character to separate the results

Concatenate two strings

Example R program to concatenate two strings

```
str1 = 'Hello'
```

```
str2 = 'World!'
```

concatenate two strings using `paste` function

```
result = paste(str1,str2) print (result)
```

Output \$

```
Rscript r_strings_concatenate_two.
```

```
R [1] "Hello World!"
```