DATA ANALYTICS WITH R, EXCEL AND TABLAEU

ASSIGNMENT 5.3 ANSWERS

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Question no:

5)

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

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

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

Ans

```
> setequal(vec1,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

Vec1 in ascending order

```
> sort(vec1)
 [1] "Cadillac Fleetwood" "Datsun 710"        "Duster 360"        "Hornet 4 Drive"    "Hornet
Sportabout"
 [6] "Mazda RX4"          "Mazda RX4 Wag"     "Merc 230"          "Merc 240D"         "Merc
280"
[11] "Merc 280C"          "Merc 450SE"        "Merc 450SL"        "Merc 450SLC"
"Valiant"
```

Vec1 in descending order

```
> sort(vec1,decreasing=TRUE)
 [1] "Valiant"           "Merc 450SLC"       "Merc 450SL"        "Merc 450SE"        "Merc
280C"
 [6] "Merc 280"          "Merc 240D"         "Merc 230"          "Mazda RX4 Wag"     "Mazda
RX4"
[11] "Hornet Sportabout" "Hornet 4 Drive"    "Duster 360"        "Datsun 710"
"Cadillac Fleetwood"
```

Vec2 in ascending order

```
> sort(vec2)
 [1] "AMC Javelin"         "Cadillac Fleetwood"  "Camaro Z28"          "Chrysler Imperial"
"Dodge Challenger"
 [6] "Fiat 128"            "Honda Civic"         "Lincoln Continental" "Merc 280C"           "Merc
450SE"
[11] "Merc 450SL"          "Merc 450SLC"         "Pontiac Firebird"    "Toyota Corolla"
"Toyota Corona"
```

Vec2 in descending order

```
> sort(vec2,decreasing = TRUE)
 [1] "Toyota Corona"       "Toyota Corolla"      "Pontiac Firebird"    "Merc 450SLC"
"Merc 450SL"
 [6] "Merc 450SE"          "Merc 280C"           "Lincoln Continental" "Honda Civic"         "Fiat
128"
[11] "Dodge Challenger"    "Chrysler Imperial"   "Camaro Z28"          "Cadillac Fleetwood"
"AMC Javelin"
```

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

Ans **paste()** concatenates vectors after converting to character.

Str() Compactly display the internal **str**ucture of an **R** object, a diagnostic function and an alternative to summary (and to some extent, dput). Ideally, only one line for each 'basic' structure is displayed. It is especially well suited to compactly display the (abbreviated) contents of (possibly nested) lists. The idea is to give reasonable output for **any R** object. It calls args for (non-primitive) function objects.

Paste() example :

```
  # First example

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

[1] "file number 32"
```

Str() example

```
> str(baskets.list)
List of 2
 $ : num [1:2, 1:6] 12 5 4 4 5 2 6 4 9 12 ...
 ..- attr(*, "dimnames")=List of 2
 .. ..$ : chr [1:2] "Granny" "Geraldine"
 .. ..$ : chr [1:6] "1st" "2nd" "3rd" "4th" ...
 $ : chr "2010-2011"
```

4) Introduce a separator when concatenating the strings.
Ans paste (..., sep = " ", collapse = NULL)