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

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

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

***Ans:***

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

vec1

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

vec2

a1<- as.numeric(vec1)

a1

a2<- as.numeric(vec2)

a2

identical(a1,a2)

all.equal(a1,a2)

identical(vec1,vec2)

isTRUE(all.equal(vec1,vec2))

setequal(vec1,vec2)

a1 %in% a2

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

vec1

a1<- as.numeric(vec1)

a1

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

vec2

a2<- as.numeric(vec2)

a2

#ascending

sort(a1)

sort(a2)

#descending

sort(a1,decreasing = T)

sort(a2,decreasing = T)

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

***Ans:***

**Str - display the structure of an arbitrary object**

a<- c("1","2","3","hey")

a

str(a)

**paste - used for Concatenate Strings**

x <- c('India won world cup in 2011','Yuvraj was man of the series')

x

paste(x[1],x[2])

**4. Introduce a separator when concatenating the strings.**

***Ans:***

x <- c('India won world cup in 2011','Yuvraj was man of the series')

x

paste(x[1],x[2], sep = " & ")