**1. Obtain the elements of the union between two character vectors.**

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

vec2 = c(rownames(mtcars[10:32,]))

vec1

vec2

union(vec1, vec2) # returns all the elements of vec1 and vec2 without repeating common elements

**2. Get those elements that are common to both vectors.**

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

vec2 = c(rownames(mtcars[10:32,]))

intersect(vec1,vec2) # names of common elements

which(vec1 %in% vec2) # index of common elements

vec1[which(vec1 %in% vec2)] # names of common elements

3. **Get the difference of the elements between two character vectors.**

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

vec2 = c(rownames(mtcars[10:32,]))

setdiff(vec1, vec2) # difference of vec 1 with vec 2

setdiff(vec2, vec1) # difference of vec 2 with vec 1

4**. Test the quality of two character vectors.**

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

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

setequal(vec1, vec2) # is vec1 equal to vec 2

setequal( union(vec1, vec2),

c(setdiff(vec1, vec2), intersect(vec1, vec2), setdiff(vec1, vec2)))