#Assignment\_3.2 - Session 3

#Q1. Obtain the elements of the union between two character vectors.

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

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

#Solution 1:

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

vec1

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

vec2

#Use union() function to obtain the elements between two characters (union)

union(vec1,vec2)

#Q2. Get those elements that are common to both vectors.

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

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

#Solution 2:

#we use intersect function

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

vec1

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

vec2

#Use intersect() function to obtain the elements common to both vectors (intersection)

intersect(vec1,vec2)

#Q3: Get the difference of the elements between two character vectors.

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

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

#Solution 3:

#It is the material that is in the first named set, that is not in the second named set.

#Use setdiff() function for the difference between two vectors.

setdiff(vec1,vec2)

setdiff(vec2,vec1)

#Q4: Test the equality of two character vectors.

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

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

#Solution 4:

#perform set opearations to check equality of the vectors

is.element(vec1,vec2)

identical(vec1,vec2)

setequal(vec1,vec2)