**Assignment 5. 2**

**Problem Statement**

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

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

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

**Answer**:

data("mtcars")

View(mtcars)

str(mtcars)

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

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

vec1

vec2

vec12<-union(vec1, vec2)

vec12

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

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

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

**Answer:**

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

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

commonvec12<-vec1%in%vec2 # gives position of common elements

vec1[commonvec12] # gives elements

intersect(vec1,vec2)

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

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

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

**Answer:**

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

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

vec1[!vec1%in%vec2]# elements of vec1 which are not present in vec2

vec2[!vec2%in%vec1]# elements of vec2 which are not present in vec1

union(vec1[!vec1%in%vec2],vec2[!vec2%in%vec1])#elements which are not common in vec1 and vec2