

## Assignments for session on "DATA MANAGEMENT USING R"

1. Obtain the elements of the union between two vectors

```
vec1 = c(rownames(mtcars[1:15,]))
vec1
vec2 = c(rownames(mtcars[10:32,]))
vec2
vec_union <- union(vec1, vec2)
vec_union #Combines the elements without repeating the common names
```

2. Get the common elements between these two vectors

```
vec1 = c(rownames(mtcars[1:15,]))
vec1
vec2 = c(rownames(mtcars[10:32,]))
vec2
vec_common <- vec1 %in% vec2 # Gives the position of common elements
vec_common
vec1[vec_common] #Combines the elements without repeating the common names
```

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

```
vec1 = c(rownames(mtcars[1:15,]))
vec1
vec2 = c(rownames(mtcars[10:32,]))
vec2
vec1_not_in_vec2 <- vec1[!vec1 %in% vec2] # Elements unique to vec1
vec1_not_in_vec2

vec2_not_in_vec1 <- vec2[!vec2 %in% vec1] # Elements unique to vec2
vec2_not_in_vec1
unique_elements_in_vec1_vec2 <- union(vec1_not_in_vec2, vec2_not_in_vec1)
unique_elements_in_vec1_vec2
```

4. Test the quality of these two character vectors.

```
vec1 = c(rownames(mtcars[1:15,]))
vec2 = c(rownames(mtcars[11:25,]))

is.element(vec1, vec2)
identical(vec1, vec2)
setequal(vec1, vec2)
vec1 %in% vec2
```