**Assignment 3.2**

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

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

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

Answer: union(vec1, vec2)

**Output**:

[1] "Mazda RX4" "Mazda RX4 Wag" "Datsun 710" "Hornet 4 Drive"

[5] "Hornet Sportabout" "Valiant" "Duster 360" "Merc 240D"

[9] "Merc 230" "Merc 280" "Merc 280C" "Merc 450SE"

[13] "Merc 450SL" "Merc 450SLC" "Cadillac Fleetwood" "Lincoln Continental"

[17] "Chrysler Imperial" "Fiat 128" "Honda Civic" "Toyota Corolla"

[21] "Toyota Corona" "Dodge Challenger" "AMC Javelin" "Camaro Z28"

[25] "Pontiac Firebird" "Fiat X1-9" "Porsche 914-2" "Lotus Europa"

[29] "Ford Pantera L" "Ferrari Dino" "Maserati Bora" "Volvo 142E"

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

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

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

Answer : intersect(vec1, vec2)

**Output**:

[1] "Merc 280" "Merc 280C" "Merc 450SE" "Merc 450SL"

[5] "Merc 450SLC" "Cadillac Fleetwood"

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

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

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

Answer: A=setdiff(vec1, vec2)

**Output**:

[1] "Mazda RX4" "Mazda RX4 Wag" "Datsun 710" "Hornet 4 Drive" "Hornet Sportabout"

[6] "Valiant" "Duster 360" "Merc 240D" "Merc 230"

B=setdiff(vec2, Vec1)

**Output**

[1] "Lincoln Continental" "Chrysler Imperial" "Fiat 128" "Honda Civic"

[5] "Toyota Corolla" "Toyota Corona" "Dodge Challenger" "AMC Javelin"

[9] "Camaro Z28" "Pontiac Firebird" "Fiat X1-9" "Porsche 914-2"

[13] "Lotus Europa" "Ford Pantera L" "Ferrari Dino" "Maserati Bora"

[17] "Volvo 142E"

4. Test the equality of two character vectors.

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

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

Answer: setequal(vec1, vec2)

**Output:**

[1] FALSE