Home work/Assignment 1

1. Create a vector x with the following entries

3 4 1 1 2 1 4 2 1 1 5 3 1 1 1 2 4 5 5 3

Check which elements of x are equal to 1 (Hint use ==

operator). Modify x so that all of the 1's are changed to 0's.

2. Create a vector y containing the elements of x that are

greater than 1.

3. Create a sequence of numbers from 1 to 20 in steps of 0.2

and store in a vector

4. Concatenate x and y into a vector called newVec.

5. Display all objects in the workspace and then remove newVec

6. Consider a vector:

x <- c(4,6,5,7,10,9,4,15)

What is the value of:

c(4,6,5,7,10,9,4,15) < 7

a. TRUE, FALSE, TRUE, FALSE, FALSE, FALSE, TRUE, FALSE

b. TRUE, TRUE, TRUE, FALSE, FALSE, FALSE, TRUE, FALSE

c. FALSE, TRUE, TRUE, FALSE, FALSE, FALSE, TRUE, FALSE

d. TRUE, TRUE, TRUE, TRUE, TRUE, FALSE, TRUE, FALSE

e. TRUE, TRUE, TRUE, FALSE, FALSE, FALSE, TRUE, FALSE

7. Consider two vectors:

p <- c (3, 5, 6, 8)

and

q <- c (3, 3, 3)

What is the value of:

p+q

a. 6, 8, 6, 8

b. 6, 8, 0, 0

c. 6, 8, NA, NA

8. Consider the vector:

x <- c(34, 56, 55, 87, NA, 4, 77, NA, 21, NA, 39)

Which R-statement will count the number of NA values in x?

a. count(is.na(X))

b. length(is.na(x))

c. sum(is.na(x))

d. count(!is.na(x))

e. sum(!is.na(x))

9. If x=c('blue','red','green','yellow')

What is the value of: is.character(x)

Exercise 10

If x=c('blue',10,'green',20)

What is the value of: is.character(x)