**Analysis of Environmental Data**

**DataCamp: Intro to R - Questions**

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Q1: What type of data is contained in the variable a?

Character

Q2: What type of data is contained in the variable b1?

numeric

Q3: What type of data is contained in the variable b2?

character

Q3: Explain what happens when you try to add b1 and b2 and why.

It doesn’t work out, because b2 is not numeric.

Q5 (1 pt.): Are the variables b1 and c1 the same type? Why or why not?

They are not, because b1 is a decimal (numeric) and c1 not (only intergers).

Q6 (3 pts.): Explain what happens when you add b1 and c1. Consider both the number of elements in each variable and the data types.

A numeric row shows up, adding every integer in the row of c1 to b1. This works although /because c1 consists of 4 integers and b1 of one numeric.

Q7 (1 pt.): Show the R code you used to create v1.

v1 <- c(-2,-1,0,1,2)

Q8 (1 pt.): Show the R code you used to create v2.

v2 <- v1 \* 3

Q9 (1 pt.): Show the R code you used to calculate the sum of elements in v2.

sum(v2)

**Q10 (1 pt.):** Show the code you used to create mat\_1.

mat1 <- matrix(vec\_4, byrow = TRUE, nrow = 3)

**Q11 (1 pt.):** Show the code you used to create mat\_2.

mat2 <- matrix(vec\_4, byrow = FALSE, nrow = 3)

**Q12 (2 pts.):** Show the R code you used to create my\_list\_1.

**vec1 <- 5.2**

**vec2 <- "five point two"**

**vec3 <- c(1:5)**

**my\_list\_1 <- list("two" = vec1, "one" =vec2, "three" = vec3)**

**Q13 (1 pt.):** Show valid R code that selects the third element of the list.

my\_list\_1[["three"]]

**Q14 (1 pt.):** Show the R code that selects the list element with the name “one”. Note: there are at least two ways to do this!

my\_list\_1[["one"]]

**Q15 (3 pts.):** Show the R code that you used to create my\_bool\_vec.

**my\_bool\_vec <- my\_vec == 3**

**Q16 (2 pts.):** Show the R code that you used to subset my\_vec using my\_bool\_vec.

my\_vec[my\_bool\_vec]