Data Camp: Intro to R **Jackie Stephens**

Due 9/25/22

Q1 (1 pt.): What type of data is contained in the variable `a`?

A character/string of text is the data contained in variable a.

Q2 (1 pt.): What type of data is contained in the variable `b1`?

Numerical data is contained in the variable b1.

Q3 (1 pt.): What type of data is contained in the variable `b2`?

A character/string of text is the data contained in variable a.

Q4 (2 pts.): Explain what happens when you try to add `b1` and `b2` and why.

"Error in b1 + b2 : non-numeric argument to binary operator" This happens because variable b1 is a number and b2 is a string of text = not the same type of data.

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

Yes, they are the same type = both numerical.

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.

Both are numerical variables, however c1 is in the form of a vector. So when you add them together you get the single numerical vvalue of b1 to the sequence of integers:

```
> b1+c1
[1] 45.6 46.6 47.6 48.6
```

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

v1 = c(-2:2)

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

v2 = 3*v1

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`.

mat_1 = matrix(vec_4, nrow = 3, ncol = 4, byrow = TRUE)

Q11 (1 pt.): Show the code you used to create `mat_2`.

mat_2 = matrix(vec_4,nrow = 3, ncol = 4, byrow = FALSE)

Q12 (2 pts.): Show the R code you used to create `my_list_1`.

v5 = c(0:5)

my_list_1 = list(5.2, "five point two", v5)

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

my_list_1[[3]]

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]