Rosalyn Bathrick

Assignment 1: DataCamp, Intro to R

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

Character

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

Numeric

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

Character

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

There is an error because the data types are not the same - character and numeric

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

b1 is numeric, c1 is a vector, but they contain the same type of data

- **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.

All the numbers are added – b1 and each integer in c1.

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

```
v1<--2:2
```

- **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`.

```
vec_4<-1:12

mat_1<-matrix(vec_4, nrow=3, byrow=TRUE)
```

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

mat_2<-matrix(vec_4, nrow=3, byrow=FALSE)

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

my_list_1<-c(5.2, "five point two", 0:5)

my_list_1<-list(two=5.2, one="five point two", three=0:5)

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

my_list_1[[3]]

[1] 0 1 2 3 4 5

- **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

[1] "five point two"

- **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[TRUE]]