

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 integers).

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]
```