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Eco634-Lab 2

Prof Nelson

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Lab 2

Question 1:

```
n = 12345

vec_1 = sample(12, n, replace = TRUE)

head(vec_1)

vec_1 == 3

vec_2 <- vec_1 == 3

vec_1[vec_2]
```

Question 2:

It is a bad idea to view which values are 3 using vec_1 because the data is large. There are a few “TRUE” values in a sea of “FALSE” which can cause some values to be missed. Secondly, this doesn’t quantify how many values of 3 there are.

Question 3:

We use the replace = TRUE logic which allows the value to be present more than one time. The sample size is 10 on a random selection function. The value 3 can only be summed when it is present, which is a 1 in 10 chance.

Question 4:

It is safer to use a logical test to select entries with value 3 because it can allow us to know how many entries there are without missing any values with visual inspection. As well as, not have to print out vec_1 to view all the values.

Question 5:

Logical sub-setting is bad practice when you are new to R. It allows the user to skip re-entering data.frame name and if you were sharing code then it might confuse the recipient. Additionally, logical sub-setting can prevent you from working with data sets of different sizes because subsetting keeps you working within the same data set.

Question 6:

```
for (i in 1:10)

{

  print(paste0("This is loop iteration: ", i))

}
```

Question 7:

```
n = 19
for (n in 1:n)
{
  print(n)
}
```

Question 8:

```
n = 17
vec_1 = sample(10, n, replace = TRUE)
for (n in vec_1)
{
  print(paste0("The element of vec_1 at index 1 is: ", n))
}
```

Question 9:

```
 create_and_print_vec = function(n, min = 1, max = 10)
{
    vec_2= sample(min:max, n, replace = TRUE)
    for (i in 1:n)
  { print(
    paste("The element at index",
          i,"is",vec_2[i]))
    }
}
create_and_print_vec(n, min = 1, max = 10)
```