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## Lab 2: R Fundamentals 2

1. `vec_2 = vec_1 == 3`
2. On my screen you are not able to see all of the entries to check that they are each a 3, and due to the influence you may not be able to catch if one of the entries is actually not a 3.
3. The sample function takes a sample of the numbers within the vector. By setting replace as true that allows the sample to be replaced with different integers each time.
4. Using a logical test removes the possibility of human error, especially when analyzing a larger data set. Additionally, using a logical test allows you to easily repeat your analysis, share your findings with others, and be able to logically trace back your findings if you later find an error.
5. Doing logical subsetting by hand is likely to result in human error affecting your calculations. If you want to re-run your code or share it with others they will not be able to reproduce your findings without doing the by hand work again, bringing another level of human error in. With large datasets you are very likely to lose your place within the dataset and have to start over counting.
6. 

```
for (i in 1:10)
{i=paste0("This is loop iteration: ", i, ".")}
  print(i)
}
```
7. 

```
n=24
for (i in 1:n)
{i=paste0("This is loop iteration: ", i, ".")}
  print(i)
}
```
8. 

```
n=17
vec_1=sample(1:10, n, replace=TRUE)
{i=paste0("The element of vec_1 at index ", (1:n), " is: ", vec_1, ".")}
  print(i)
}
```
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(paste0("The element of vec_1 at index ", i, " is ", vec_2[i]))
}
create_and_print_vec(24, min= 1, max= 10)
```