SYNTAX OF A **for** LOOP

```r
x <- c(-1, 7, 8, 11)
tolerance <- vector(mode = "character",
                    length = length(x))

for (i in seq_along(x)) {
  if(x[i] >= 10) {
    value <- "x exceeds acceptable tolerance levels"
  } else if(x[i] >= 0 & x[i] < 10) {
    value <- "x is within acceptable tolerance levels"
  } else {
    value <- "x is negative"
  }
  tolerance[i] <- value
}
```

1. Vector to analyze

2. Initiate output shell

3. For each element in our x

4. Assess test expressions, execute relevant statement, and save as value

5. For that respective element add the value in the corresponding element in out output shell

YOUR TURN

Remember this if-else statement we made?

```r
file_1 <- "Month-"
file_2 <- ".csv"
month <- 12

if(month %in% 1:9) {
  file_name <- paste0("data/", file_1, 0, month, file_2)
  file.exists(file_name)
} else if(month %in% 10:12) {
  file_name <- paste0("data/", file_1, month, file_2)
  file.exists(file_name)
} else {
  print("Invalid month")
}
```