SYNTAX OF A `for` LOOP

```
x <- 7

if(x >= 10) {
  print("x exceeds acceptable tolerance levels")
} else if(x >= 0 & x < 10) {
  print("x is within acceptable tolerance
levels")
} else {
  print("x is negative")
}
[1] "x is within acceptable tolerance levels"
```

Remember this extended if…else statement?

Let’s implement it into a for loop

SYNTAX OF A `for` LOOP

```
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