- We can start using what we know so far to simulate a data set. Let's simulate data from an independent samples experiment with one factor with two levels.

- Each of the 24 participants will have a measure - participants 1-12 are in the ‘fast’ condition and 13-24 in the ‘slow’ condition.

- First let's create a vector for our participant ID number.  It will range from 1 to 24

```
> participant <- seq(1:24)

> participant

 [1]  1  2  3  4  5  6  7  8  9 10 11 12 13 14
15 16 17 18 19 20 21 22 23 24
```

- Now we need to create the conditions - Condition 1 we will label 'fast' and Condition 2 we will label ‘slow'.

- We use the `c()` function to combine the arguments that follow it (i.e., "fast" and "slow") into a vector.

```
> condition <- c(rep("fast", times = 12), rep("slow",
times = 12))
```

```
> condition

 [1] "fast" "fast" "fast" "fast" "fast" "fast" "fast"
"fast" "fast" "fast" "fast" "fast"

[13] "slow" "slow" "slow" "slow" "slow" "slow" "slow"
"slow" "slow" "slow" "slow" "slow"
```