We can code it to simulate the outcomes of 100,000 such games…

```
set.seed(1234)

team_b_goals <- NULL

for(i in 1:100000) {
  score <- sum(sample(c(1, 0), size = 20, replace = TRUE, prob = c(0.055, 1-.055)))
  team_b_goals <- c(team_b_goals, score)}

team_a_goals <- rep(1, 100000)

all_games <- as.tibble(cbind(team_a_goals, team_b_goals))
```

```
> nrow(filter(all_games, team_a_goals > team_b_goals))
[1] 32022
> nrow(filter(all_games, team_a_goals < team_b_goals))
[1] 30337
> nrow(filter(all_games, team_a_goals == team_b_goals))
[1] 37641
```

We see that out of 100,000 simulations, Team A wins on 32,022 occasions. Team B wins on 30,337 occasions and there are 37,641 ties.

The gganimate package

- The new `gganimate` package currently needs to be installed separately from the core tidyverse packages.

- It follows the Tidyverse philosophy and extends the capabilities of the `ggplot()` function - in may ways it's like adding an extra layer to your plots in the same way you might use `facet_wrap()` but specifying parameters related to your animation frames (and how to transition between those frames).

- Let's look at some examples…