

# Homework 2

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Don't show code! (echo?)

## Libraries

I will use the `tidyverse` package to run this code.

## Randomly generate three symbols

The following function generates three slot machine symbols: + DD - diamonds + 7 - sevens + BBB - triple bars + BB - double bars + B - single bars + C - cherries + 0 - zeroes

## Calculate score

## Full slot machine

## Playing the slot machine

```
## [1] "0"    "BB"   "BBB"
## [1] 0
```

```
## [1] "BB" "7"   "0"
## [1] 0
```

```
## [1] "0" "0" "B"
## [1] 0
```

## Homework 2 Section

In this section, I am going to modify the play function and add a function that counts the number of turns before a player runs out of money.

### 1. Create `play2()`

`play2()` changes the probabilities of triple bars, zeroes, and cherries, and it adds the values for three single bars. In order to change the probabilities, we need to reassign them in `get_symbols()` above.

## 2. Create `number_of_turns()`

Next, we are going to create a new function that returns the number of turns played before running out of money.

## 3. Which game allows for the most turns on average?

```
## [1] "0"  "BB" "0"  
## [1] 0  
## [1] 50
```

```
## [1] "0" "0" "0"  
## [1] 0  
## [1] 50
```

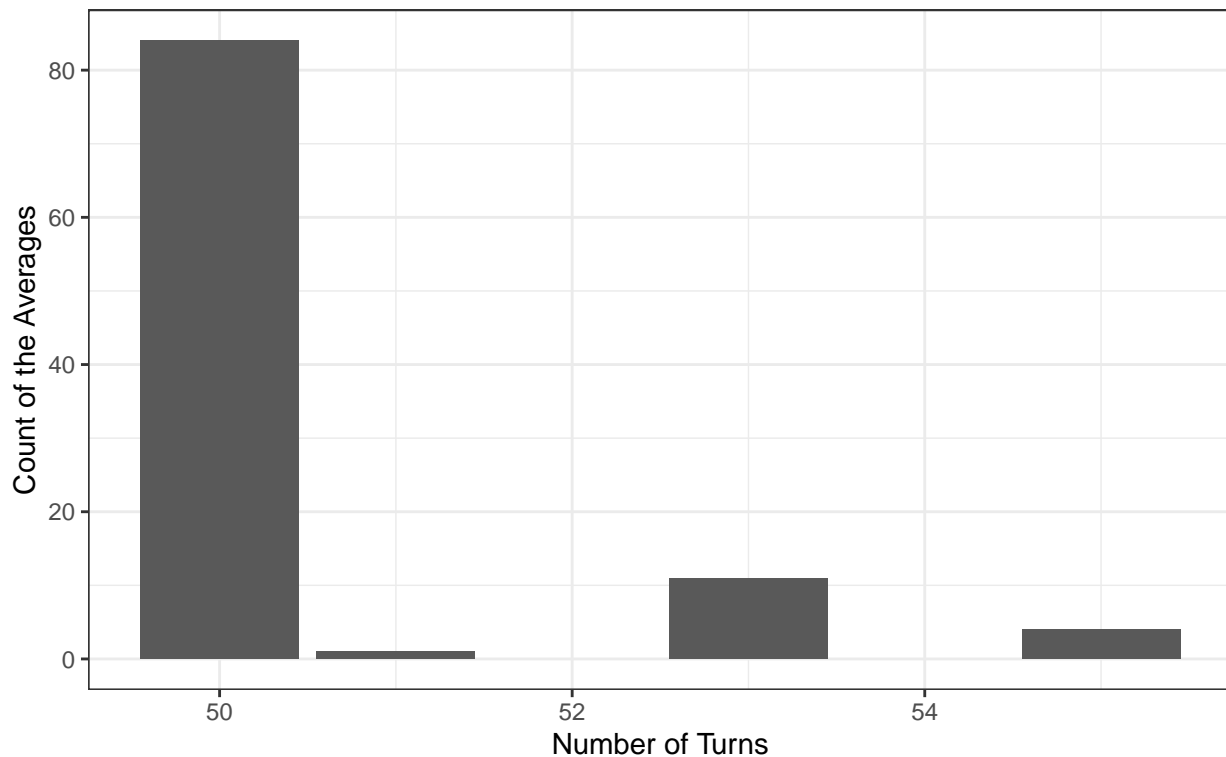
```
## [1] 50.54
```

```
## [1] 50.48
```

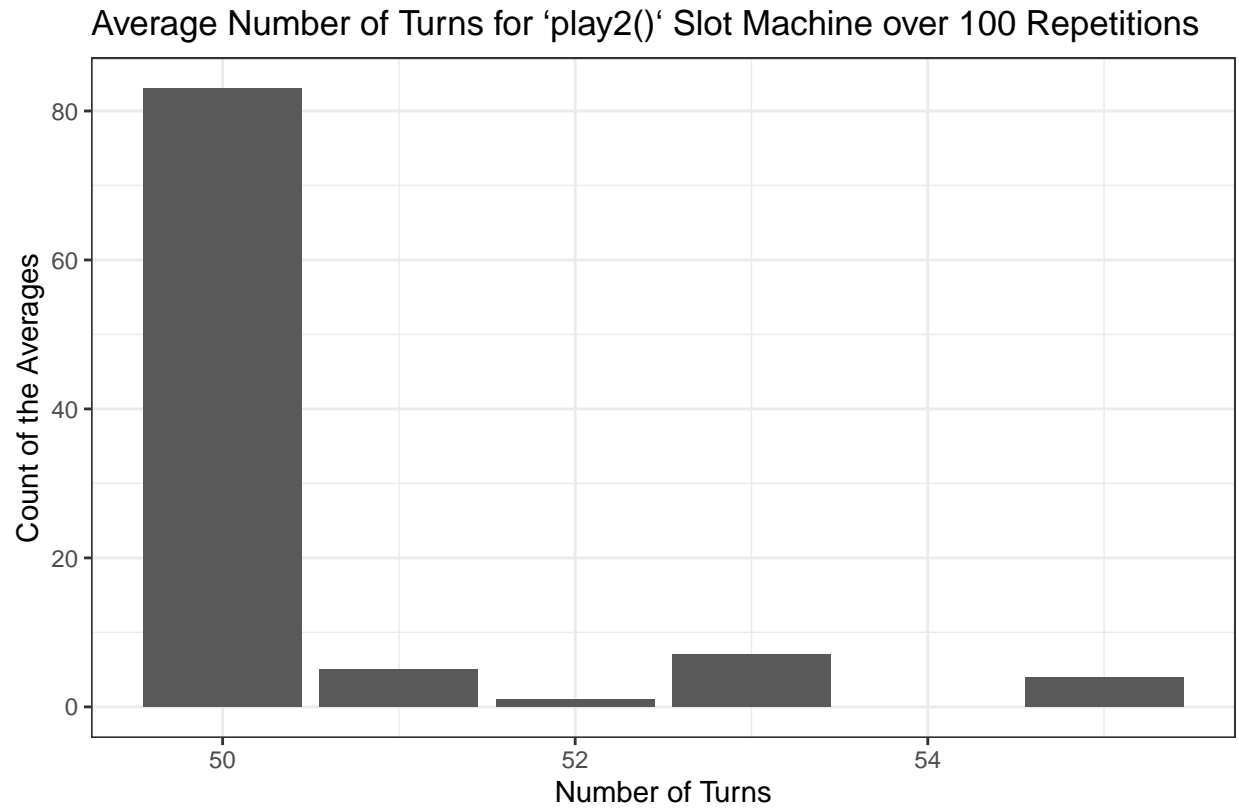
## 4. Supporting analysis for recommendation

Given the results of 100 replications of both slot machines, I have noticed that `play2()` tends to have a higher average mean than `play()`.

Average Number of Turns for 'play()' Slot Machine over 100 Repetitions



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5. Plot that compares the distribution of results from each game