STAT 385

Minas Barsoum - Spring 2020, UIUC

French Roulette

- A French roulette has:
    - **37 colored and numbered pockets** on the wheel.
    - 0 is green.
    - In number ranges from 1 to 10 and 19 to 28:
        - Odd numbers are red.
        - Even numbers are black.
    - In ranges from 11 to 18 and 29 to 36:
        - Odd numbers are black.
        - Even numbers are red.

Importing the data set

```
wheel <- read.csv(file = "https://nkha149.github.io/stat385-sp2020/f
iles/data/roulette.csv ")
wheel
```

```
##    number color
## 1        0 green
## 2        1   red
## 3        2 black
## 4        3   red
## 5        4 black
## 6        5   red
## 7        6 black
## 8        7   red
## 9        8 black
## 10       9   red
## 11      10 black
## 12      11 black
## 13      12   red
## 14      13 black
## 15      14   red
## 16      15 black
## 17      16   red
## 18      17 black
## 19      18   red
## 20      19   red
## 21      20 black
## 22      21   red
## 23      22 black
## 24      23   red
## 25      24 black
## 26      25   red
## 27      26 black
## 28      27   red
## 29      28 black
## 30      29 black
## 31      30   red
## 32      31 black
## 33      32   red
## 34      33 black
## 35      34   red
## 36      35 black
## 37      36   red
```

The Function

```
roulette <- function(bet=14){
  roll <- sample(x = 0:36, size = 1)
  roll
  roll==bet
}
```

```
set.seed(385)
roulette(bet = 10)
```

```
## [1] FALSE
```

```
set.seed(385)
roulette()
```

```
## [1] FALSE
```

```
set.seed(385)
roulette(bet = 5)
```

```
## [1] TRUE
```

```
set.seed(420)
roulette(bet = 4)
```

```
## [1] TRUE
```

```
set.seed(400)
roulette(bet = 36)
```

```
## [1] TRUE
```