```r
library(readxl)
library(lme4)
```

```
## Loading required package: Matrix
```

```r
library(lmerTest)
```

```
##
## Attaching package: 'lmerTest'
```

```
## The following object is masked from 'package:lme4':
##
##     lmer
```

```
## The following object is masked from 'package:stats':
##
##     step
```

```r
library(car)
```

```
## Loading required package: carData
```

```r
library(MuMIn)
```

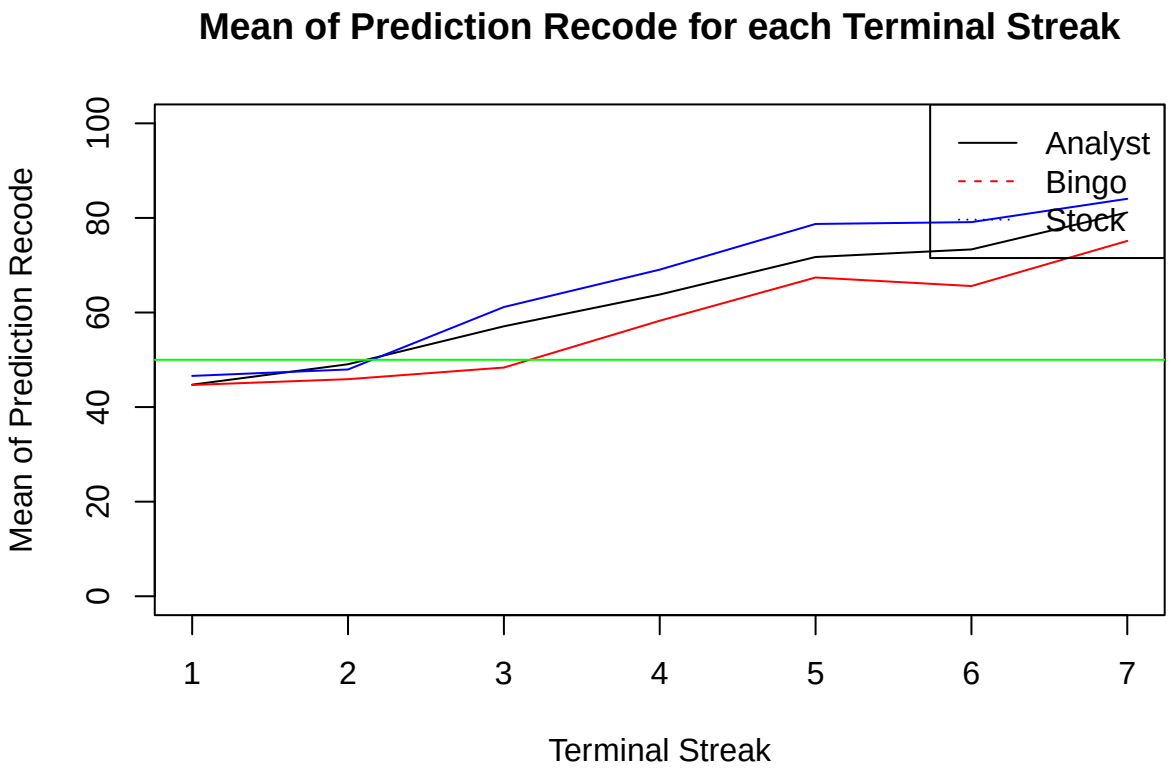
```r
data <- read_excel("../Data/PredictingOutcomes_ParticipantPredictions.xlsx", sheet = "Study 1A")

# divide the data based on the generator
data1 <- data[data$generator == "analyst",]
data2 <- data[data$generator == "bingo",]
data3 <- data[data$generator == "stock",]
```

calculate the mean of prediciotn_recode for each terminwal streak from 1 to 7

```r
mean1 <- aggregate(data1$prediction_recode, by = list(data1$terminal_streak_length), FUN = mean)
mean2 <- aggregate(data2$prediction_recode, by = list(data2$terminal_streak_length), FUN = mean)
mean3 <- aggregate(data3$prediction_recode, by = list(data3$terminal_streak_length), FUN = mean)
```

```r
plot(mean1$Group.1,mean1$x, type = "l",ylim=c(0,100), xlab = "Terminal Streak", ylab = "Mean of Predicti
lines(mean2$Group.1,mean2$x, col = "red")
lines(mean3$Group.1,mean3$x,  col = "blue")
abline(h = 50, col = "green")
legend("topright", legend = c("Analyst", "Bingo", "Stock"), col = c("black", "red", "blue"), lty = 1:3)
```



calculate the mean of prediciotn_recode for each participant_id

```
mean1_id <- aggregate(data1$prediction_recode, by = list(data1$participant_id), FUN = mean)
mean2_id <- aggregate(data2$prediction_recode, by = list(data2$participant_id), FUN = mean)
mean3_id <- aggregate(data3$prediction_recode, by = list(data3$participant_id), FUN = mean)

mean1_id
```

```
##    Group.1        x
## 1        1 56.77778
## 2        3 53.44444
## 3        6 46.83333
## 4        8 48.72222
## 5       14 47.83333
## 6       17 52.16667
## 7       20 52.27778
## 8       24 50.61111
## 9       28 55.83333
## 10      32 36.22222
## 11      34 58.83333
## 12      37 48.33333
## 13      39 60.44444
## 14      40 36.61111
## 15      43 46.77778
## 16      46 52.94444
## 17      52 55.88889
## 18      54 49.22222
## 19      57 57.66667
## 20      59 62.38889
## 21      64 58.27778
```

```
## 22      69 26.66667
## 23      72 58.27778
## 24      74 42.88889
## 25      76 51.44444
## 26      82 39.61111
## 27      85 53.94444
## 28      88 60.61111
## 29      90 53.44444
## 30      93 61.66667
## 31      96 54.61111
## 32      99 56.22222
## 33     102 50.72222
## 34     105 50.88889
## 35     108 48.27778
## 36     110 54.94444
## 37     112 54.00000
## 38     114 53.83333
## 39     117 58.55556
## 40     120 33.44444
## 41     122 60.72222
## 42     125 49.50000
## 43     128 68.22222
## 44     132 53.44444
## 45     134 54.72222
## 46     136 51.50000
## 47     139 46.00000
## 48     141 48.83333
## 49     144 53.77778
## 50     147 52.88889
```