Day 2

```
library(stringr)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
setwd("/Users/saumyasinghal/PycharmProjects/aoc2023")
my_data <- read.delim( "day2/day2.txt", sep = "\n", header = FALSE)$V1
games = str_match(my_data, "^Game (\\d*):(.*)$")
```

```
is_possible <- function (gameInfo){
  matches <- str_match_all(gameInfo, "(\\d*) (red|blue|green)")[[1]]
  match_df <- data.frame(
    balls= matches[,2],
    color=matches[,3]
  ) %>%
    group_by(color) %>%
    summarise(max_balls = max(as.numeric(balls)))
  if (match_df$max_balls[match_df$color=="blue"] > 14){
    FALSE
  } else if (match_df$max_balls[match_df$color=="green"] > 13){
    FALSE
  } else if (match_df$max_balls[match_df$color=="red"] > 12){
    FALSE
  } else {
    TRUE
  }
}
#print(is_possible(" 1 red, 3 blue, 15 green; 13 green, 2 blue; 6 green; 6 green, 8 blue; 4 green, 9 bl
```

```
mydf <- data.frame(game_id = as.numeric(games[,2]),
                   results = sapply(games[,3],is_possible))
possible <- filter(mydf, results==T)
View(possible)
sum(possible$game_id)
```

```
## [1] 2105
```