TOY_1

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Enero 2022

DATA

```
players_L <- paste0("LP",1:10)
players_A <- paste0("AP",1:10)


toy <- data.frame(
  "id_play" = 1:15,
  "season" = c(rep("S2017",15)),
  "game" = c(rep("G1",10), rep("G2",5)),
  "points_L" = c(0,0,0,2,2,2,5,5,7,7,7,7,10,10,12),
  "points_A" = c(0,2,2,2,4,4,7,7,9,9,10,10,12,12,12),
  "LP1" = c(rep(players_L[1],4),rep(players_L[6],5),rep(players_L[1],6)),
  "LP2" = players_L[2],
  "LP3" = c(rep(players_L[3],7), rep(players_L[7],2),rep(players_L[3],6)),
  "AP1" = players_A[1],
  "AP2" = c(rep(players_A[2],8),players_A[7], rep(players_A[2],6)),
  "AP3" = players_A[3]
  )

toy_backup <- toy

toy$PM <- toy$points_L-toy$points_A

knitr::kable(toy)
```

id_play	season	game	points_L	points_A	LP1	LP2	LP3	AP1	AP2	AP3	PM
1	S2017	G1	0	0	LP1	LP2	LP3	AP1	AP2	AP3	0
2	S2017	G1	0	2	LP1	LP2	LP3	AP1	AP2	AP3	-2
3	S2017	G1	0	2	LP1	LP2	LP3	AP1	AP2	AP3	-2
4	S2017	G1	2	2	LP1	LP2	LP3	AP1	AP2	AP3	0
5	S2017	G1	2	4	LP6	LP2	LP3	AP1	AP2	AP3	-2
6	S2017	G1	2	4	LP6	LP2	LP3	AP1	AP2	AP3	-2
7	S2017	G1	5	7	LP6	LP2	LP3	AP1	AP2	AP3	-2
8	S2017	G1	5	7	LP6	LP2	LP7	AP1	AP2	AP3	-2
9	S2017	G1	7	9	LP6	LP2	LP7	AP1	AP7	AP3	-2
10	S2017	G1	7	9	LP1	LP2	LP3	AP1	AP2	AP3	-2
11	S2017	G2	7	10	LP1	LP2	LP3	AP1	AP2	AP3	-3
12	S2017	G2	7	10	LP1	LP2	LP3	AP1	AP2	AP3	-3
13	S2017	G2	10	12	LP1	LP2	LP3	AP1	AP2	AP3	-2
14	S2017	G2	10	12	LP1	LP2	LP3	AP1	AP2	AP3	-2

id_play	season	game	points_L	points_A	LP1	LP2	LP3	AP1	AP2	AP3	PM
15	S2017	G2	12	12	LP1	LP2	LP3	AP1	AP2	AP3	0

ORDENAR DF

```
players_pbp <- toy[6:11] #subset de solo jugadores pbp
resto_pbp <- cbind(toy[1:5], toy[12])

## Ordenar alfabeticamente jugadores
order_players_pbp <- lapply(1:nrow(players_pbp), function(row)
                     players_pbp[row, order(players_pbp[row, ], decreasing = TRUE)])
df_order_players_pbp <- data.frame(matrix(unlist(order_players_pbp),
                        nrow=length(order_players_pbp), byrow=TRUE))
names(df_order_players_pbp) <- c(paste0("LP",1:3), paste0("AP",1:3))

df_new_toy <- cbind(resto_pbp, df_order_players_pbp)

## Ordernar Columnas
col_order <- c("season", "game", "id_play", "points_L", "points_A", "PM",
               paste0("LP",1:3), paste0("AP",1:3))
df_order_toy <- df_new_toy[, col_order]
knitr::kable(df_order_toy)
```

season	game	id_play	points_L	points_A	PM	LP1	LP2	LP3	AP1	AP2	AP3
S2017	G1	1	0	0	0	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G1	2	0	2	-2	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G1	3	0	2	-2	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G1	4	2	2	0	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G1	5	2	4	-2	LP6	LP3	LP2	AP3	AP2	AP1
S2017	G1	6	2	4	-2	LP6	LP3	LP2	AP3	AP2	AP1
S2017	G1	7	5	7	-2	LP6	LP3	LP2	AP3	AP2	AP1
S2017	G1	8	5	7	-2	LP7	LP6	LP2	AP3	AP2	AP1
S2017	G1	9	7	9	-2	LP7	LP6	LP2	AP7	AP3	AP1
S2017	G1	10	7	9	-2	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G2	11	7	10	-3	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G2	12	7	10	-3	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G2	13	10	12	-2	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G2	14	10	12	-2	LP3	LP2	LP1	AP3	AP2	AP1
S2017	G2	15	12	12	0	LP3	LP2	LP1	AP3	AP2	AP1

MERGE Jugadores y Temporada+Game

```
library(tidyr)
df_order_toy <- df_order_toy %>%
  unite("Merged_Players", LP1:AP3, remove = TRUE) %>%
  unite("Merged_SG", c("season", "game"))

knitr::kable(df_order_toy)
```

Merged_SG	id_play	points_L	points_A	PM	Merged_Players
S2017_G1	1	0	0	0	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G1	2	0	2	-2	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G1	3	0	2	-2	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G1	4	2	2	0	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G1	5	2	4	-2	LP6_LP3_LP2_AP3_AP2_AP1
S2017_G1	6	2	4	-2	LP6_LP3_LP2_AP3_AP2_AP1
S2017_G1	7	5	7	-2	LP6_LP3_LP2_AP3_AP2_AP1
S2017_G1	8	5	7	-2	LP7_LP6_LP2_AP3_AP2_AP1
S2017_G1	9	7	9	-2	LP7_LP6_LP2_AP7_AP3_AP1
S2017_G1	10	7	9	-2	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G2	11	7	10	-3	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G2	12	7	10	-3	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G2	13	10	12	-2	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G2	14	10	12	-2	LP3_LP2_LP1_AP3_AP2_AP1
S2017_G2	15	12	12	0	LP3_LP2_LP1_AP3_AP2_AP1

UNIQUE quintetos

```
library(dplyr)
players_Merged <- df_order_toy$Merged_Players == lag(df_order_toy$Merged_Players)
                                        ## col_TrueFalse si son igual que lag row
SG_DIF <- df_order_toy$Merged_SG == lag(df_order_toy$Merged_SG)

df_order_toy$TF_Cambios <- ifelse(((players_Merged == FALSE)|(SG_DIF == FALSE )), "C", "NC")

df_order_toy
```

```
##    Merged_SG id_play points_L points_A PM          Merged_Players TF_Cambios
## 1   S2017_G1       1        0        0  0 LP3_LP2_LP1_AP3_AP2_AP1       <NA>
## 2   S2017_G1       2        0        2 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 3   S2017_G1       3        0        2 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 4   S2017_G1       4        2        2  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 5   S2017_G1       5        2        4 -2 LP6_LP3_LP2_AP3_AP2_AP1          C
## 6   S2017_G1       6        2        4 -2 LP6_LP3_LP2_AP3_AP2_AP1         NC
## 7   S2017_G1       7        5        7 -2 LP6_LP3_LP2_AP3_AP2_AP1         NC
## 8   S2017_G1       8        5        7 -2 LP7_LP6_LP2_AP3_AP2_AP1          C
## 9   S2017_G1       9        7        9 -2 LP7_LP6_LP2_AP7_AP3_AP1          C
## 10  S2017_G1      10        7        9 -2 LP3_LP2_LP1_AP3_AP2_AP1          C
## 11  S2017_G2      11        7       10 -3 LP3_LP2_LP1_AP3_AP2_AP1          C
## 12  S2017_G2      12        7       10 -3 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 13  S2017_G2      13       10       12 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 14  S2017_G2      14       10       12 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 15  S2017_G2      15       12       12  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
```

Hasta aquí tenemos detectados cuando hay cambios

STINTS

```
df_order_toy$stint <- ifelse(lead(df_order_toy$TF)=="C", df_order_toy$TF, NA)
                                              #Filas que tenemos que conservar

last_row = tail(df_order_toy, n =1)           #Tendremos que añadirla al final.
```

```
df_order_toy
```

```
##    Merged_SG id_play points_L points_A PM          Merged_Players TF_Cambios
## 1   S2017_G1       1        0        0  0 LP3_LP2_LP1_AP3_AP2_AP1       <NA>
## 2   S2017_G1       2        0        2 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 3   S2017_G1       3        0        2 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 4   S2017_G1       4        2        2  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 5   S2017_G1       5        2        4 -2 LP6_LP3_LP2_AP3_AP2_AP1          C
## 6   S2017_G1       6        2        4 -2 LP6_LP3_LP2_AP3_AP2_AP1         NC
## 7   S2017_G1       7        5        7 -2 LP6_LP3_LP2_AP3_AP2_AP1         NC
## 8   S2017_G1       8        5        7 -2 LP7_LP6_LP2_AP3_AP2_AP1          C
## 9   S2017_G1       9        7        9 -2 LP7_LP6_LP2_AP7_AP3_AP1          C
## 10  S2017_G1      10        7        9 -2 LP3_LP2_LP1_AP3_AP2_AP1          C
## 11  S2017_G2      11        7       10 -3 LP3_LP2_LP1_AP3_AP2_AP1          C
## 12  S2017_G2      12        7       10 -3 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 13  S2017_G2      13       10       12 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 14  S2017_G2      14       10       12 -2 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 15  S2017_G2      15       12       12  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
##    stint
## 1   <NA>
## 2   <NA>
## 3   <NA>
## 4     NC
## 5   <NA>
## 6   <NA>
## 7     NC
## 8      C
## 9      C
## 10     C
## 11  <NA>
## 12  <NA>
## 13  <NA>
## 14  <NA>
## 15  <NA>
```

```
library(tidyr)
STINTS <- df_order_toy %>% drop_na(stint)
STINTS <- rbind(STINTS, last_row)
STINTS
```

```
##    Merged_SG id_play points_L points_A PM          Merged_Players TF_Cambios
## 1   S2017_G1       4        2        2  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
## 2   S2017_G1       7        5        7 -2 LP6_LP3_LP2_AP3_AP2_AP1         NC
## 3   S2017_G1       8        5        7 -2 LP7_LP6_LP2_AP3_AP2_AP1          C
## 4   S2017_G1       9        7        9 -2 LP7_LP6_LP2_AP7_AP3_AP1          C
## 5   S2017_G1      10        7        9 -2 LP3_LP2_LP1_AP3_AP2_AP1          C
## 15  S2017_G2      15       12       12  0 LP3_LP2_LP1_AP3_AP2_AP1         NC
##    stint
## 1     NC
## 2     NC
## 3      C
## 4      C
## 5      C
## 15  <NA>
```

```
dim(STINTS)
```

```
## [1] 6 8
```