

# Premier League 2019/20 season analysis

This is a document for analyzing the Premier League seasonal performance of players and teams

## Loading Required Packages

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.0    v purrr   0.3.4
## v tibble  3.0.1    v dplyr   0.8.5
## v tidyr   1.0.3    v stringr 1.4.0
## v readr   1.3.1    v forcats 0.5.0
```

```
## -- Conflicts ----- tidyverse_conflicts() --
```

```
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(gridExtra)
```

```
##
```

```
## Attaching package: 'gridExtra'
```

```
## The following object is masked from 'package:dplyr':
```

```
##
```

```
##      combine
```

## Loading Required Datasets

```
table <- read.csv("~/DataBEL/Premier League 2019_20 Table.csv")
assists <- read.csv("~/DataBEL/Premier League 2019_20 Assists.csv",
                    encoding = "UTF-8")
goals <- read.csv("~/DataBEL/Premier League 2019_20 Goal Scored.csv",
                  encoding = "UTF-8")
clean_sheets <- read.csv("~/DataBEL/Premier League 2019_20 Clean Sheets.csv",
                        encoding = "UTF-8")
```

## Column names of the datasets

```
colnames(table)
```

```
## [1] "Position" "Team.Name" "Played" "Won" "Drawn" "Lost"
## [7] "GF" "GA" "GD" "Points"
```

```
colnames(assists)
```

```
## [1] "Rank" "Player" "Club" "Nationality" "Assists"
```

```
colnames(goals)
```

```
## [1] "Rank" "Player" "Club" "Nationality" "goals_scored"
```

```
colnames(clean_sheets)
```

```
## [1] "Rank" "Player" "Club" "Nationality" "clean_sheets"
```

## The Final Premier League 2019/20 Table

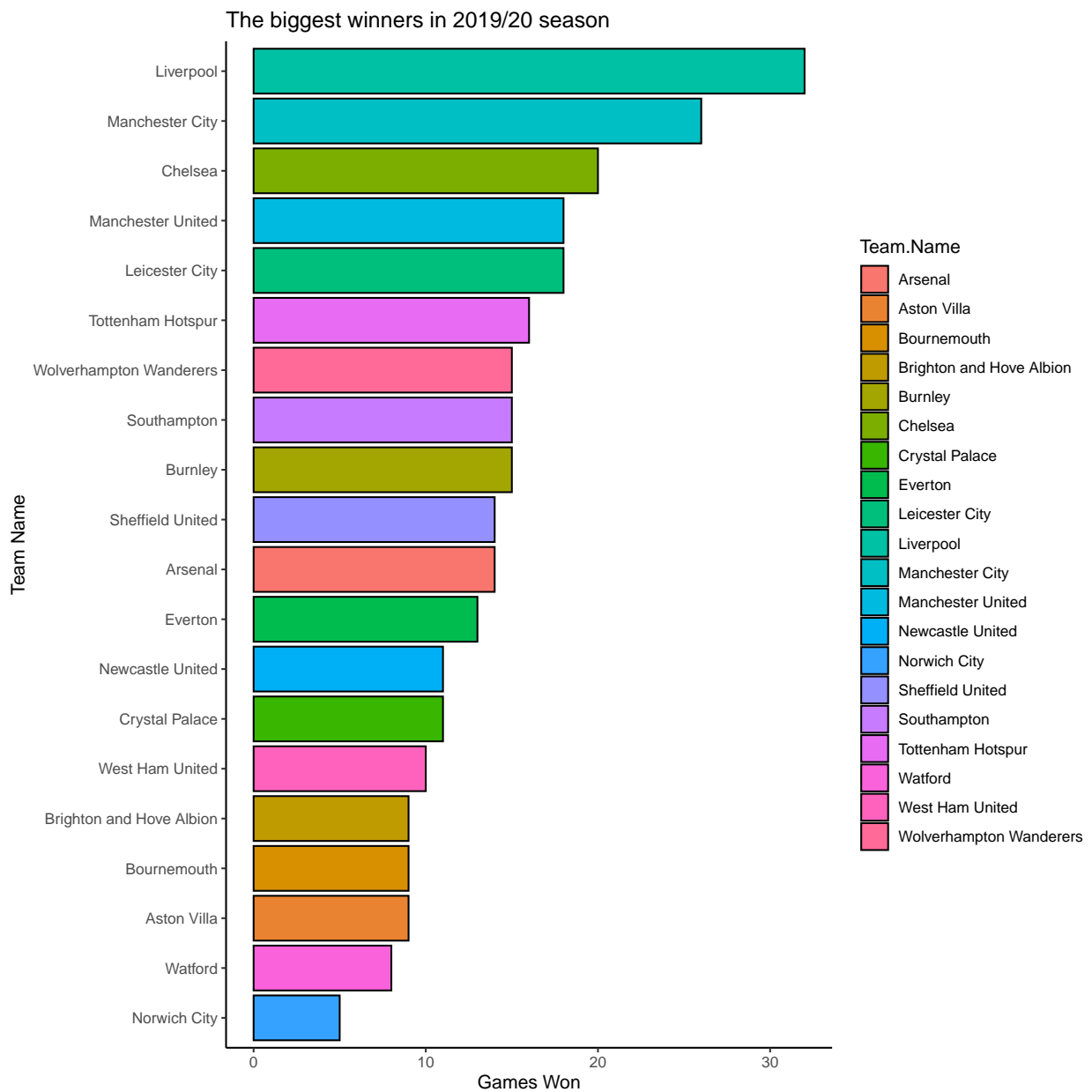
```
pdf("PL table.pdf", height=11, width=8.5)
grid.table(table)
knitr::kable(table, caption = "Premier League 2019/20 season")
```

Table 1: Premier League 2019/20 season

Position	Team.Name	Played	Won	Drawn	Lost	GF	GA	GD	Points
1	Liverpool	38	32	3	3	85	33	52	99
2	Manchester City	38	26	3	9	102	35	67	81
3	Manchester United	38	18	12	8	66	36	30	66
4	Chelsea	38	20	6	12	69	54	15	66
5	Leicester City	38	18	8	12	67	41	26	62
6	Tottenham Hotspur	38	16	11	11	61	47	14	59
7	Wolverhampton Wanderers	38	15	14	9	51	40	11	59
8	Arsenal	38	14	14	10	56	48	8	56
9	Sheffield United	38	14	12	12	39	39	0	54
10	Burnley	38	15	9	14	43	50	-7	54
11	Southampton	38	15	7	16	51	60	-9	52
12	Everton	38	13	10	15	44	56	-12	49
13	Newcastle United	38	11	11	16	38	58	-20	44
14	Crystal Palace	38	11	10	17	31	50	-19	43
15	Brighton and Hove Albion	38	9	14	15	39	54	-15	41
16	West Ham United	38	10	9	19	49	62	-13	39
17	Aston Villa	38	9	8	21	41	67	-26	35
18	Bournemouth	38	9	7	22	40	65	-25	34
19	Watford	38	8	10	20	36	64	-28	34
20	Norwich City	38	5	6	27	26	75	-49	21

## Biggest Winners vs Biggest Losers

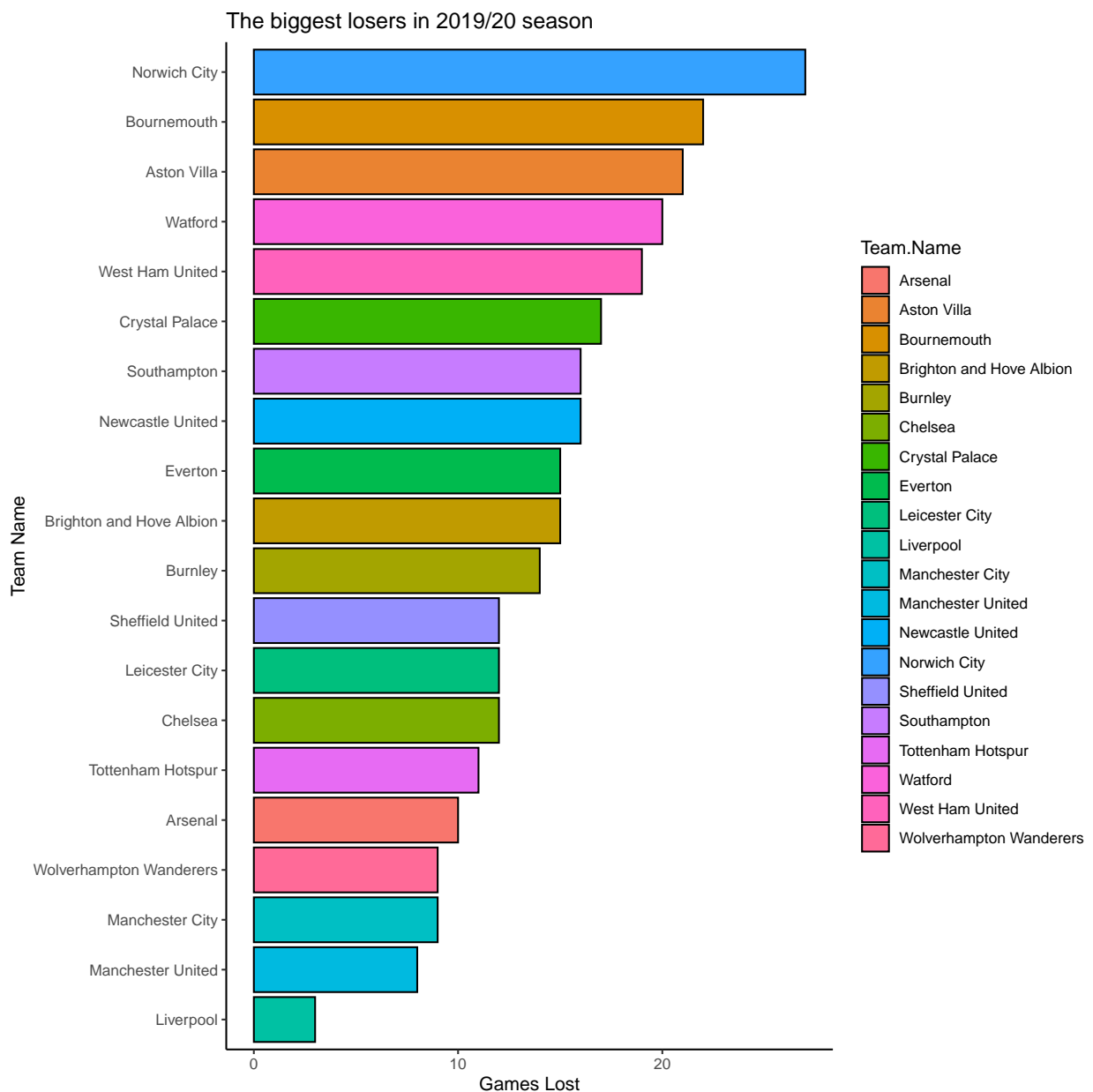
```
table %>%  
  arrange(desc(Won)) %>%  
  ggplot(aes(reorder(Team.Name, Won), Won, fill = Team.Name)) +  
  geom_bar(stat = "identity", color = "black") +  
  labs(title = "The biggest winners in 2019/20 season",  
       y = "Games Won", x = "Team Name") +  
  coord_flip() +  
  theme_classic()
```



```
ggsave("table-won.png")
```

```
## Saving 9 x 9 in image
```

```
table %>%
  arrange(desc(Lost)) %>%
  ggplot(aes(reorder(Team.Name, Lost), Lost, fill = Team.Name)) +
  geom_bar(stat = "identity", color = "black") +
  labs(title = "The biggest losers in 2019/20 season",
       y = "Games Lost", x = "Team Name") +
  coord_flip() +
  theme_classic()
```

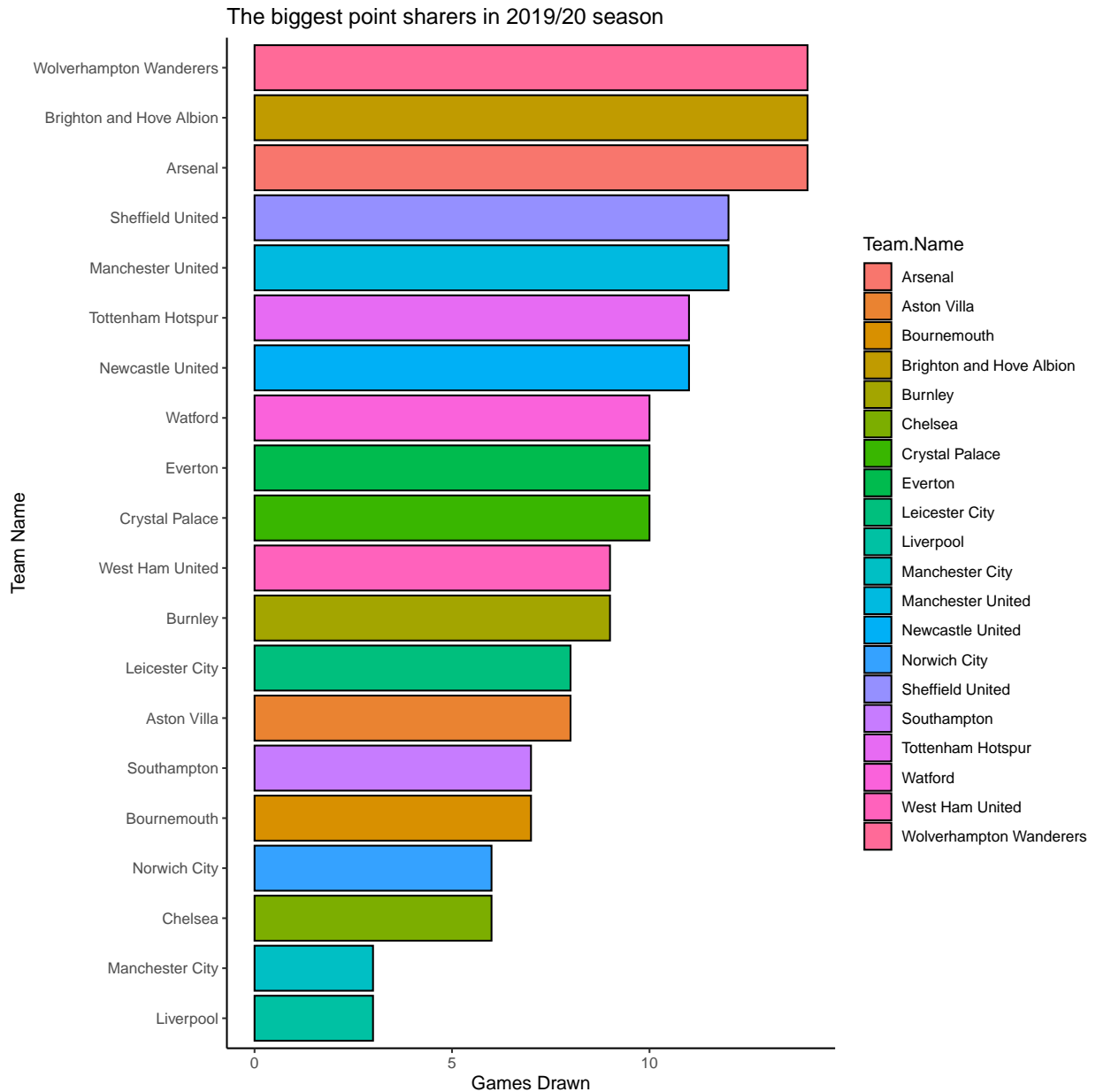


```
ggsave("table-lost.png")
```

```
## Saving 9 x 9 in image
```

Who Shared the Most Points?

```
table %>%  
  arrange(desc(Drawn)) %>%  
  ggplot(aes(reorder(Team.Name, Drawn), Drawn, fill = Team.Name)) +  
  geom_bar(stat = "identity", color = "black") +  
  labs(title = "The biggest point sharers in 2019/20 season",  
        y = "Games Drawn", x = "Team Name") +  
  coord_flip() +  
  theme_classic()
```



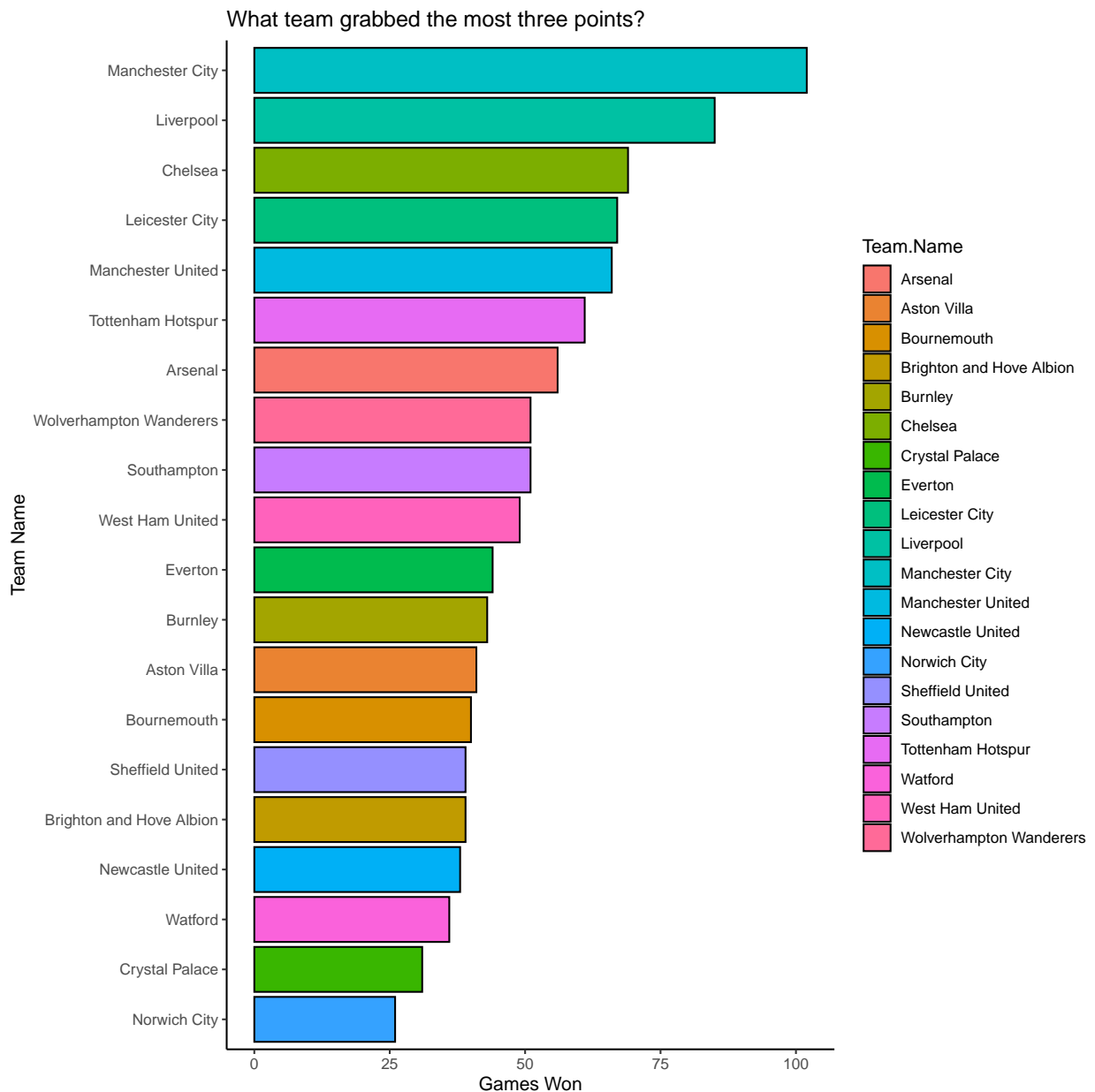
```
ggsave("table-drawn.png")
```

```
## Saving 9 x 9 in image
```

## Goals Scored vs Goals Conceded

```
table %>%
  arrange(desc(GF)) %>%
  ggplot(aes(reorder(Team.Name, GF), GF, fill = Team.Name)) +
  geom_bar(stat = "identity", color = "black") +
  labs(title = "What team grabbed the most three points?",
```

```
y = "Games Won", x = "Team Name") +  
coord_flip() +  
theme_classic()
```

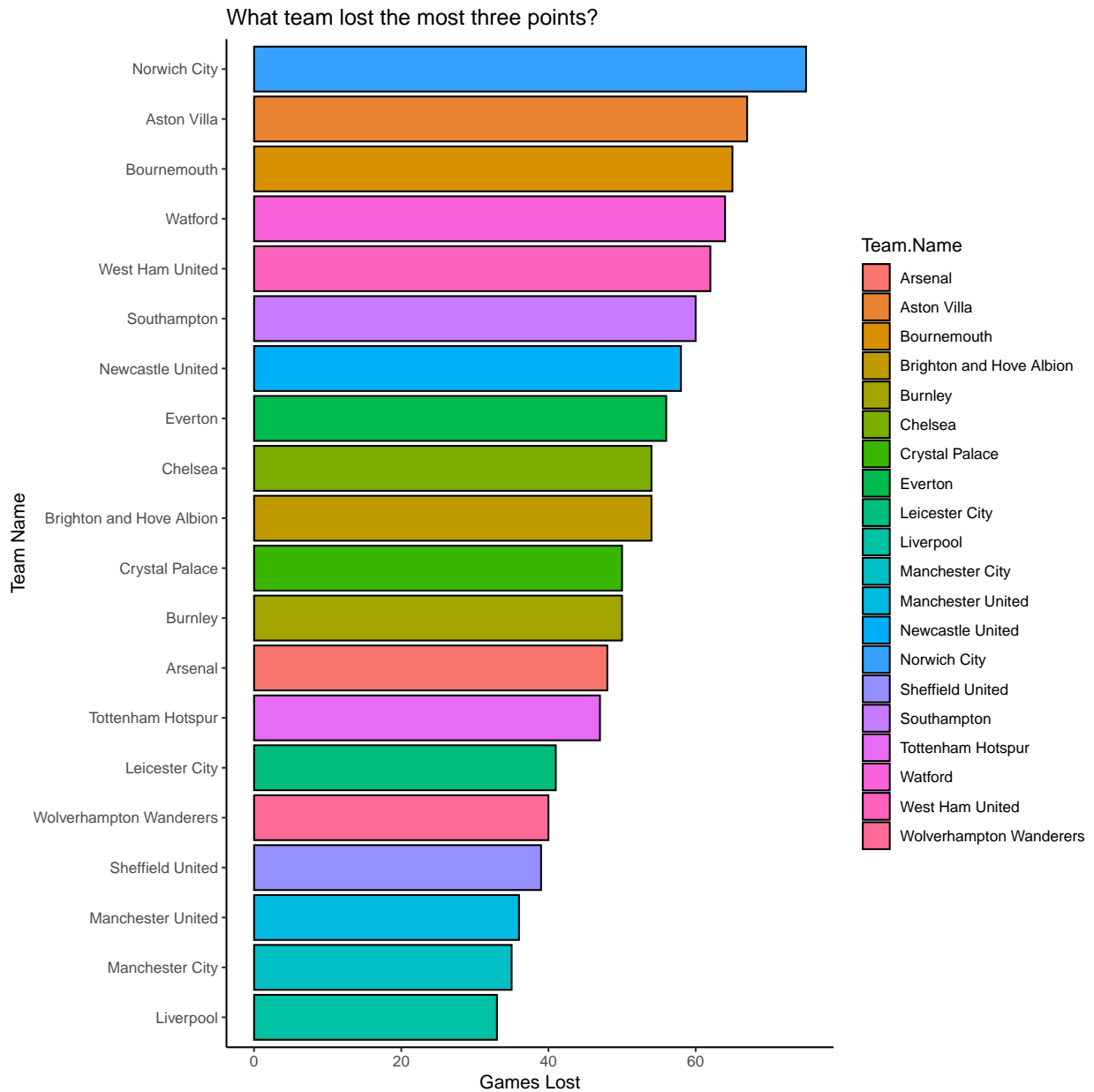


```
ggsave("goals-scored.png")
```

## Saving 9 x 9 in image

```
table %>%  
  arrange(desc(GA)) %>%  
  ggplot(aes(reorder(Team.Name, GA), GA, fill = Team.Name)) +  
  geom_bar(stat = "identity", color = "black") +
```

```
labs(title = "What team lost the most three points?",
     y = "Games Lost", x = "Team Name") +
coord_flip() +
theme_classic()
```



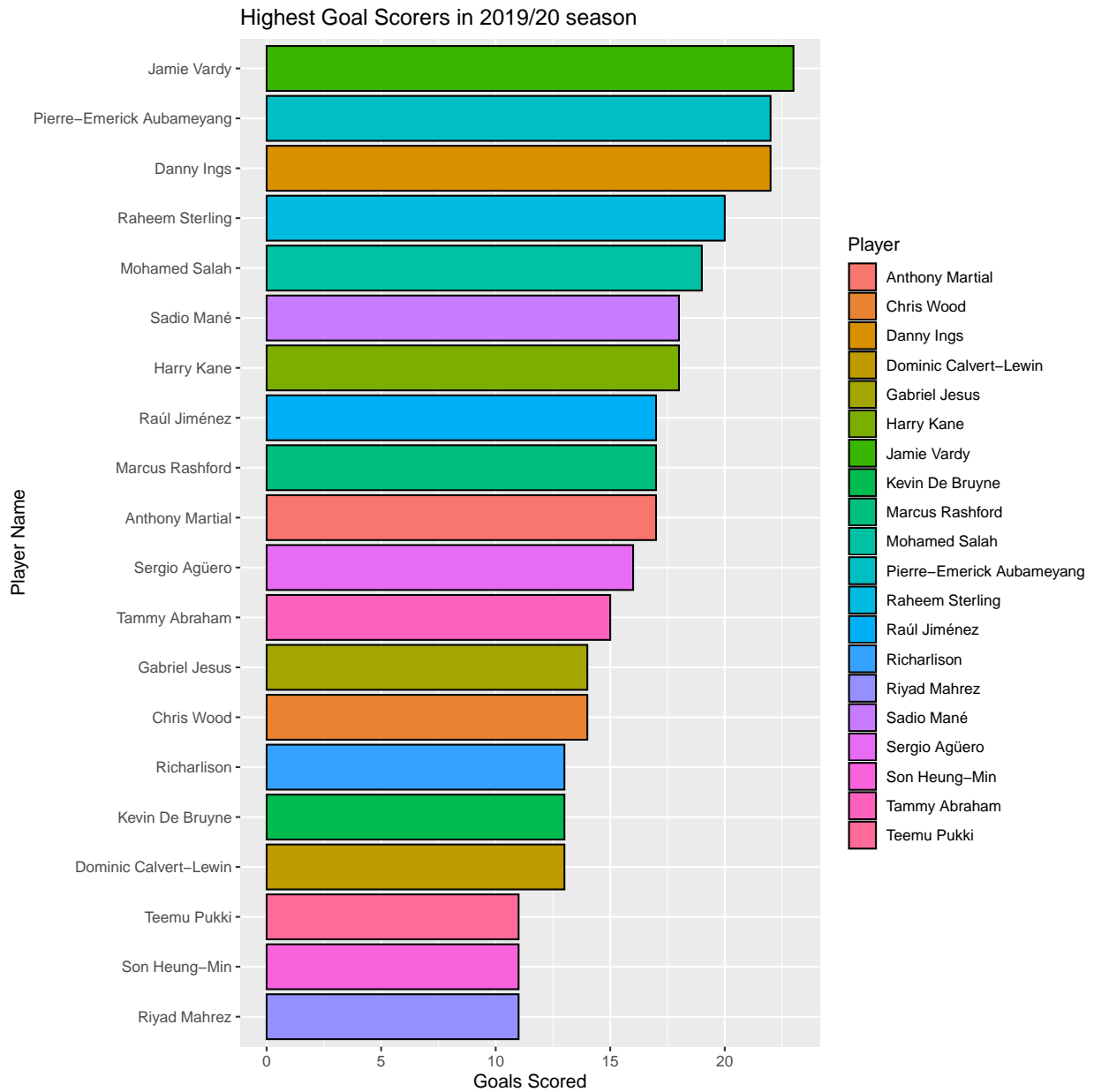
```
ggsave("goals-conceded.png")
```

```
## Saving 9 x 9 in image
```



## Highest Goal Scorers

```
goals %>%
  arrange(desc(goals_scored)) %>%
  ggplot(aes(reorder(Player, goals_scored), goals_scored, fill = Player)) +
  geom_bar(stat = "identity", color = "black") +
  labs(title = "Highest Goal Scorers in 2019/20 season",
       y = "Goals Scored", x = "Player Name") +
  coord_flip()
```

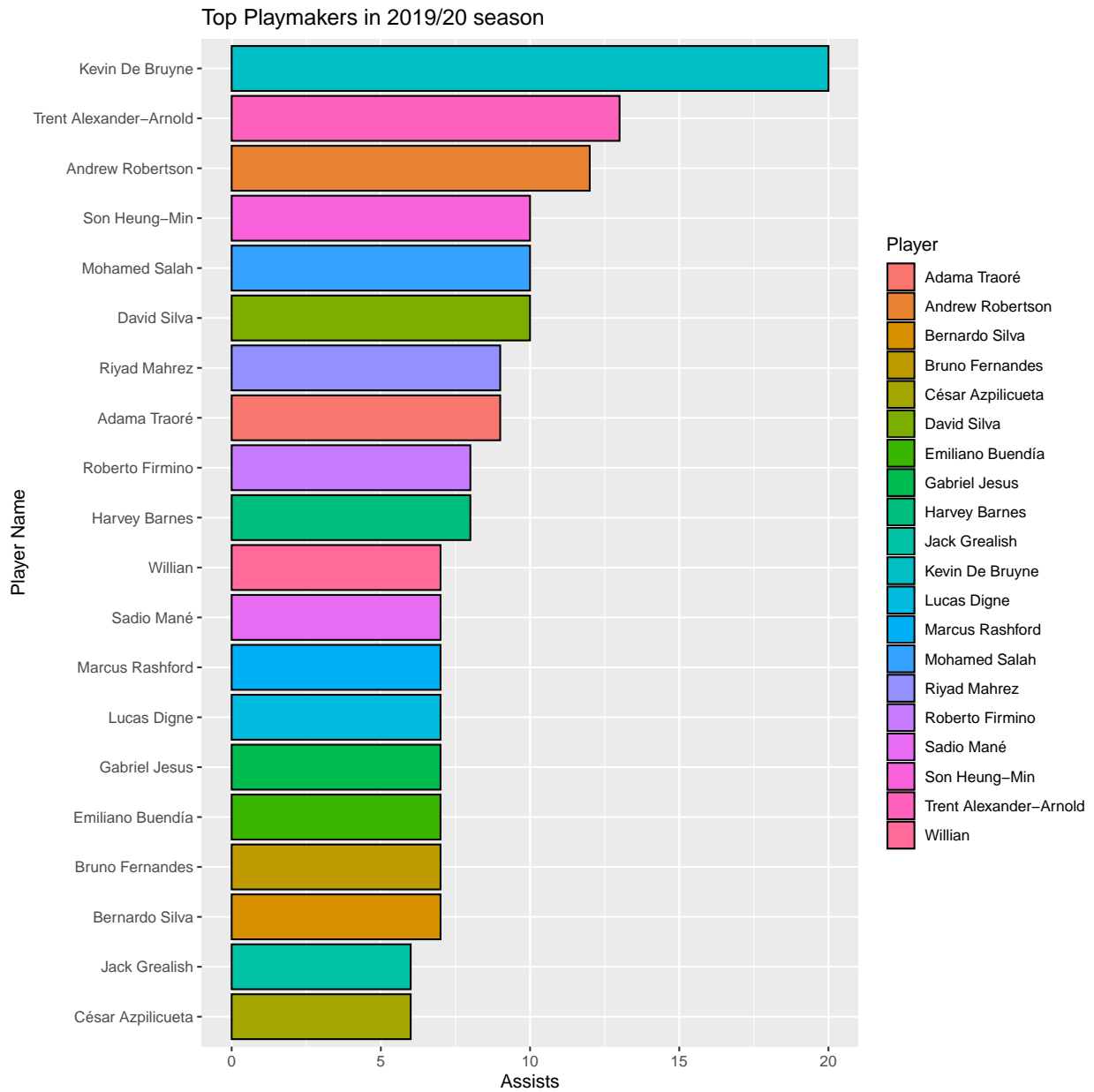


```
ggsave("goal-scorers.png")
```

```
## Saving 9 x 9 in image
```

## Top Playmakers

```
assists %>%
  arrange(desc(Assists)) %>%
  ggplot(aes(reorder(Player, Assists), Assists, fill = Player)) +
  geom_bar(stat = "identity", color = "black") +
  labs(title = "Top Playmakers in 2019/20 season",
       y = "Assists", x = "Player Name") +
  coord_flip()
```

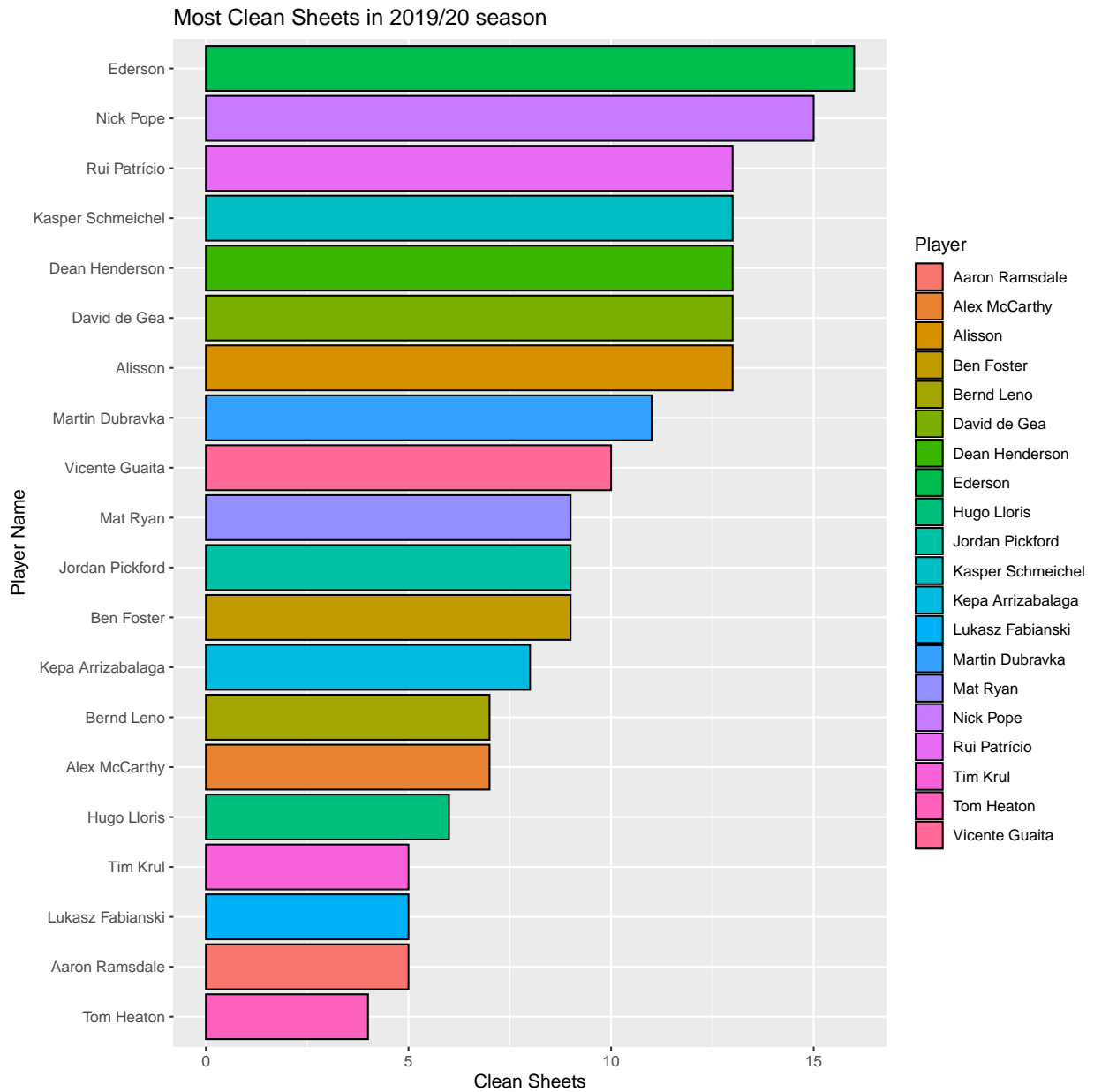


```
ggsave("assists.png")
```

```
## Saving 9 x 9 in image
```

## Most Clean Sheets

```
clean_sheets %>%
  arrange(desc(clean_sheets)) %>%
  ggplot(aes(reorder(Player, clean_sheets), clean_sheets, fill = Player)) +
  geom_bar(stat = "identity", color = "black") +
  labs(title = "Most Clean Sheets in 2019/20 season",
       y = "Clean Sheets", x = "Player Name") +
  coord_flip()
```



```
ggsave("clean-sheets.png")
```

```
## Saving 9 x 9 in image
```