

# Color Palettes in R

*TF*

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Colors, amirite? Finding the right ones to make a plot look good can be hard. I always like to use colors that really help set my plots apart. **tidyverse** and **ggplot** in particular are great at incorporating wonderful palettes. However, recently I was vexed by a plot where I couldn't just use a theme addition to add the colors I wanted and instead had to specify each color I wanted. At the time I wanted to use something from the **ggsci** package but couldn't find the names or hex codes for the color. This post is meant to be a reference for myself and others on the different hex codes for packages.

## libraries

```
library(tidyverse)
library(scales)
library(RColorBrewer)
library(ggsci)
library(wesanderson)
```

## ggsci colors and Hex (not a complete list)

JAMA

```
show_col(pal_jama("default")(7))
```

NEJM

```
show_col(pal_nejm("default")(7))
```

nature publishing group

```
show_col(pal_npg("nrc")(10))
```

Univof Chicago

```
show_col(pal_uchicago("default")(9))
```

```
show_col(pal_uchicago("light")(9))
```

```
show_col(pal_uchicago("dark")(9))
```

J of Clin Oncology

```
show_col(pal_jco("default")(10))
```

Lancet

```
show_col(pal_lancet("lanonc")(9))
```

Star Trek

```
show_col(pal_startrek("uniform")(7))
```

Simpsons

```
show_col(pal_simpsons("springfield")(16))
```

Rick and Morty

```
show_col(pal_rickandmorty("schwifty")(12))
```

## Display overall Brewer colors

```
display.brewer.all()
```

```
brewer.pal.info
```

##	maxcolors	category	colorblind
## BrBG	11	div	TRUE
## PiYG	11	div	TRUE
## PRGn	11	div	TRUE
## PuOr	11	div	TRUE
## RdBu	11	div	TRUE
## RdGy	11	div	FALSE
## RdYlBu	11	div	TRUE
## RdYlGn	11	div	FALSE
## Spectral	11	div	FALSE
## Accent	8	qual	FALSE
## Dark2	8	qual	TRUE
## Paired	12	qual	TRUE
## Pastel1	9	qual	FALSE
## Pastel2	8	qual	FALSE
## Set1	9	qual	FALSE
## Set2	8	qual	TRUE
## Set3	12	qual	FALSE
## Blues	9	seq	TRUE
## BuGn	9	seq	TRUE
## BuPu	9	seq	TRUE

## GnBu	9	seq	TRUE
## Greens	9	seq	TRUE
## Greys	9	seq	TRUE
## Oranges	9	seq	TRUE
## OrRd	9	seq	TRUE
## PuBu	9	seq	TRUE
## PuBuGn	9	seq	TRUE
## PuRd	9	seq	TRUE
## Purples	9	seq	TRUE
## RdPu	9	seq	TRUE
## Reds	9	seq	TRUE
## YlGn	9	seq	TRUE
## YlGnBu	9	seq	TRUE
## YlOrBr	9	seq	TRUE
## YlOrRd	9	seq	TRUE

## Brewer Hex and Color palette

BrBG can use:

```
brewer.pal(n=11,name="BrBG")
```

```
## [1] "#543005" "#8C510A" "#BF812D" "#DFC27D" "#F6E8C3" "#F5F5F5" "#C7EAE5"
## [8] "#80CDC1" "#35978F" "#01665E" "#003C30"
```

```
display.brewer.pal(n=11,name="BrBG")
```

or can use `show_col` command instead

```
show_col(brewer_pal(palette = "BrBG")(11))
```

## Wes Anderson Movie Color Themes

```
wes_palettes
```

```
## $BottleRocket1
## [1] "#A42820" "#5F5647" "#9B110E" "#3F5151" "#4E2A1E" "#550307" "#0C1707"
##
## $BottleRocket2
## [1] "#FAD510" "#CB2314" "#273046" "#354823" "#1E1E1E"
##
## $Rushmore1
## [1] "#E1BD6D" "#EABE94" "#0B775E" "#35274A" "#F2300F"
##
## $Rushmore
## [1] "#E1BD6D" "#EABE94" "#0B775E" "#35274A" "#F2300F"
##
## $Royal1
## [1] "#899DA4" "#C93312" "#FAEFD1" "#DC863B"
```

```

##
## $Royal2
## [1] "#9A8822" "#F5CDB4" "#F8AFA8" "#FDDDA0" "#74A089"
##
## $Zissou1
## [1] "#3B9AB2" "#78B7C5" "#EBCC2A" "#E1AF00" "#F21A00"
##
## $Darjeeling1
## [1] "#FF0000" "#00A08A" "#F2AD00" "#F98400" "#5BBCD6"
##
## $Darjeeling2
## [1] "#ECCBAE" "#046C9A" "#D69C4E" "#ABDDDE" "#000000"
##
## $Chevalier1
## [1] "#446455" "#FDD262" "#D3DDDC" "#C7B19C"
##
## $FantasticFox1
## [1] "#DD8D29" "#E2D200" "#46ACC8" "#E58601" "#B40F20"
##
## $Moonrise1
## [1] "#F3DF6C" "#CEAB07" "#D5D5D3" "#24281A"
##
## $Moonrise2
## [1] "#798E87" "#C27D38" "#CCC591" "#29211F"
##
## $Moonrise3
## [1] "#85D4E3" "#F4B5BD" "#9C964A" "#CDC08C" "#FAD77B"
##
## $Cavalcanti1
## [1] "#D8B70A" "#02401B" "#A2A475" "#81A88D" "#972D15"
##
## $GrandBudapest1
## [1] "#F1BB7B" "#FD6467" "#5B1A18" "#D67236"
##
## $GrandBudapest2
## [1] "#E6A0C4" "#C6CDF7" "#D8A499" "#7294D4"
##
## $IsleofDogs1
## [1] "#9986A5" "#79402E" "#CCBA72" "#0F0D0E" "#D9D0D3" "#8D8680"
##
## $IsleofDogs2
## [1] "#EAD3BF" "#AA9486" "#B6854D" "#39312F" "#1C1718"

```

Bottle Rocket 1

```
show_col(wes_palettes$BottleRocket1)
```

#A42820	#5F5647	#9B110E
#3F5151	#4E2A1E	#550307
#0C1707		

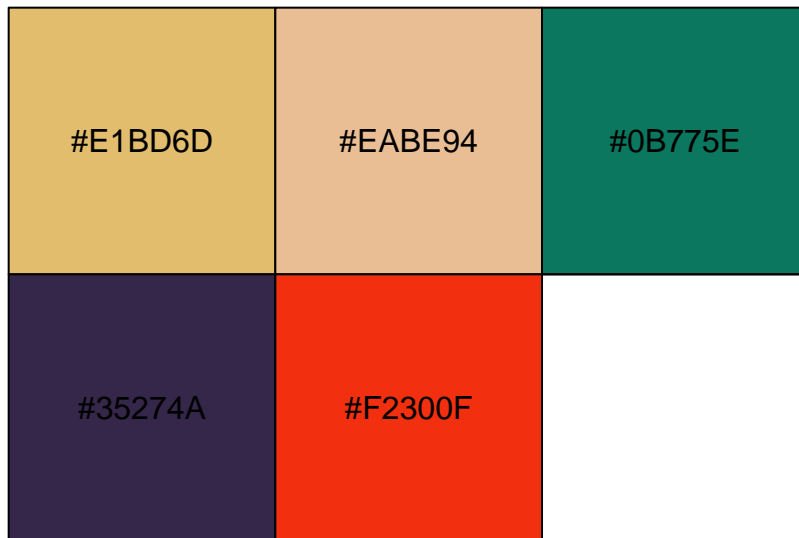
Bottle Rocket 2

```
show_col(wes_palettes$BottleRocket2)
```

#FAD510	#CB2314	#273046
#354823	#1E1E1E	

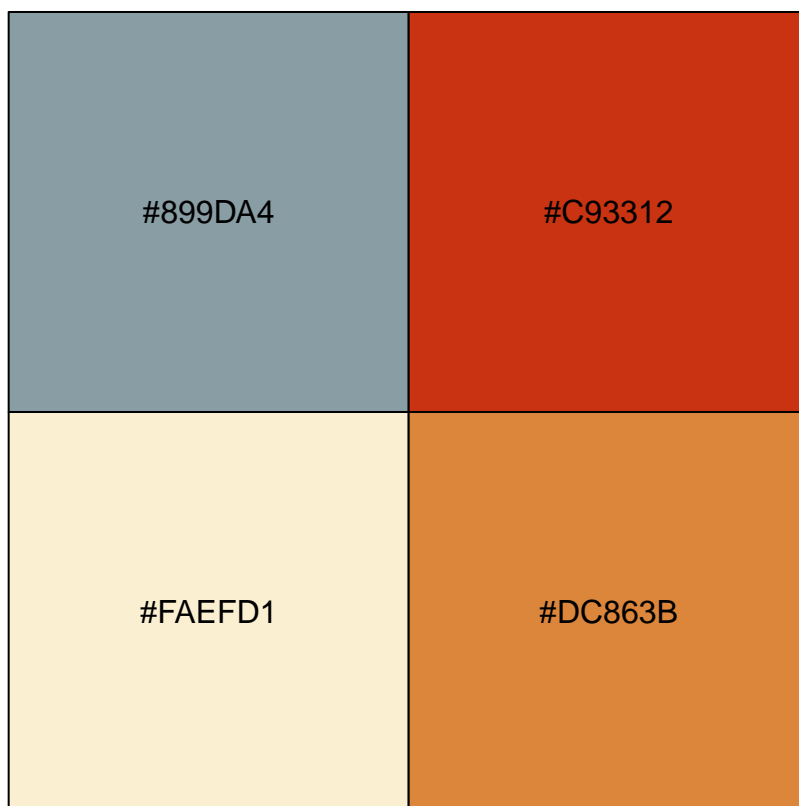
Rushmore 1

```
show_col(wes_palettes$Rushmore1)
```



Royal 1

```
show_col(wes_palettes$Royal1)
```



Royal 2

```
show_col(wes_palettes$Royal2)
```

#9A8822	#F5CDB4	#F8AFA8
#FDDDA0	#74A089	

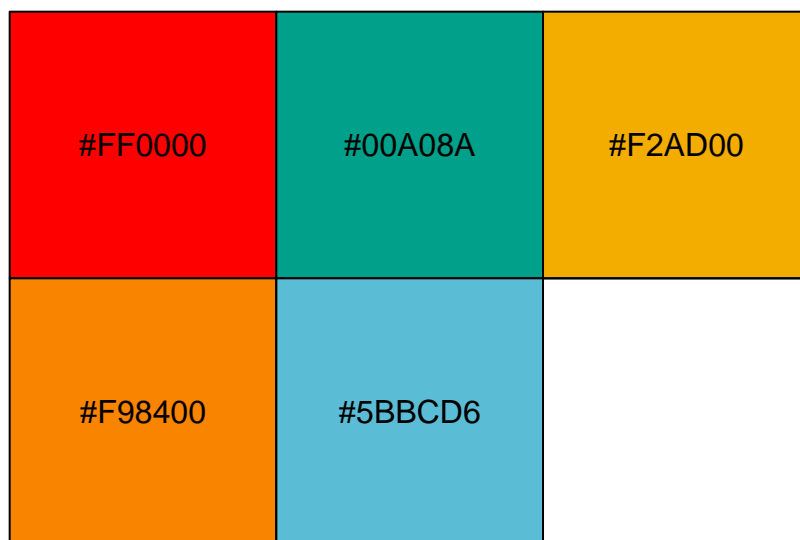
Zissou1

```
show_col(wes_palettes$Zissou1)
```

#3B9AB2	#78B7C5	#EBCC2A
#E1AF00	#F21A00	

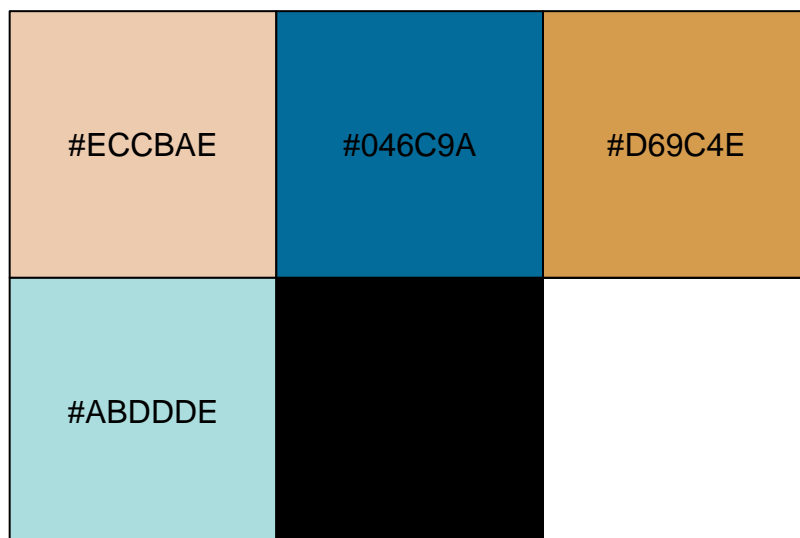
Darjeeling1

```
show_col(wes_palettes$Darjeeling1)
```



Darjeeling2

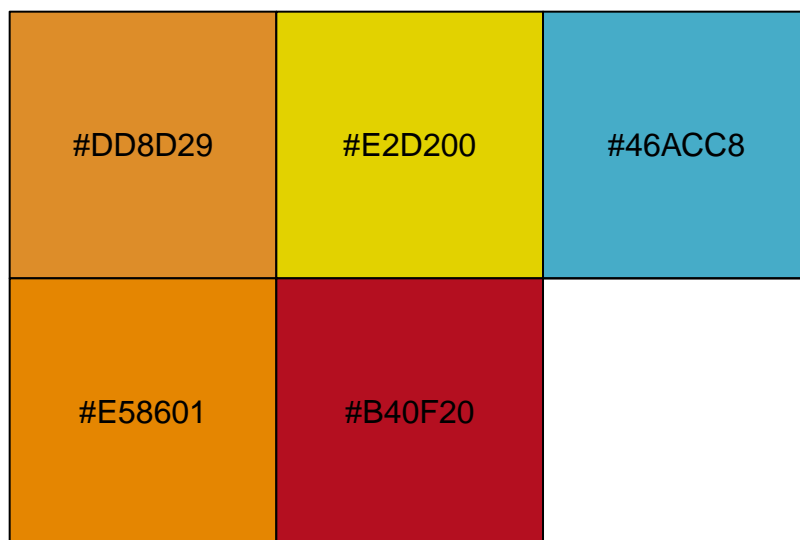
```
show_col(wes_palettes$Darjeeling2)
```



Fantastic Fox 1

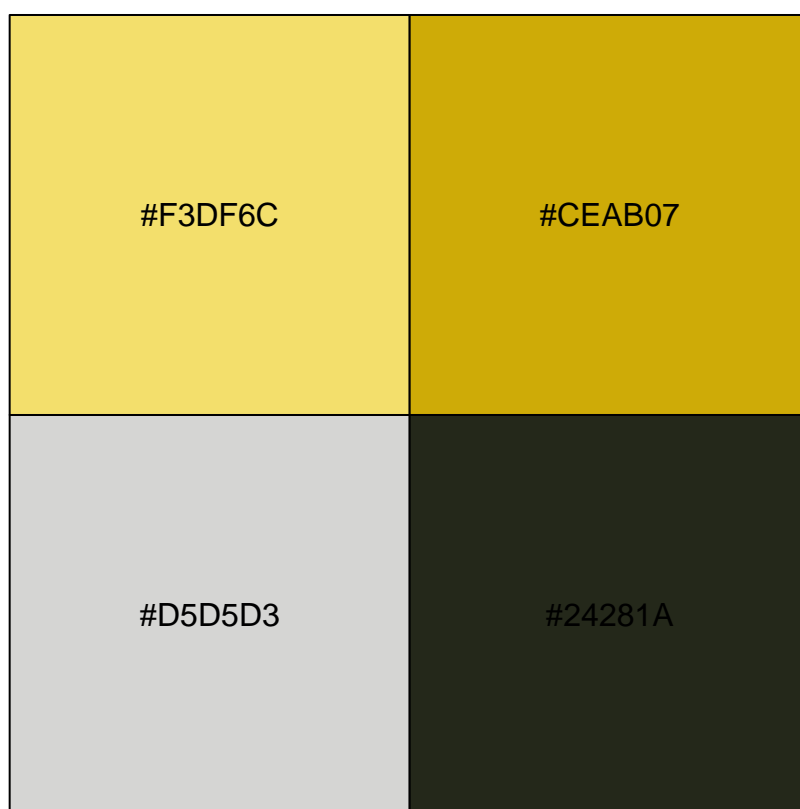
```
show_col(wes_palettes$FantasticFox1)
```





Moonrise1

```
show_col(wes_palettes$Moonrise1)
```



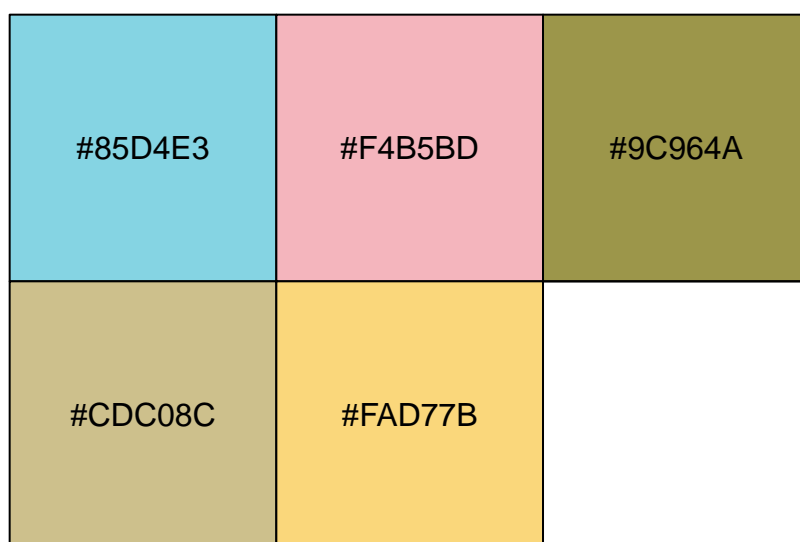
Moonrise2

```
show_col(wes_palettes$Moonrise2)
```



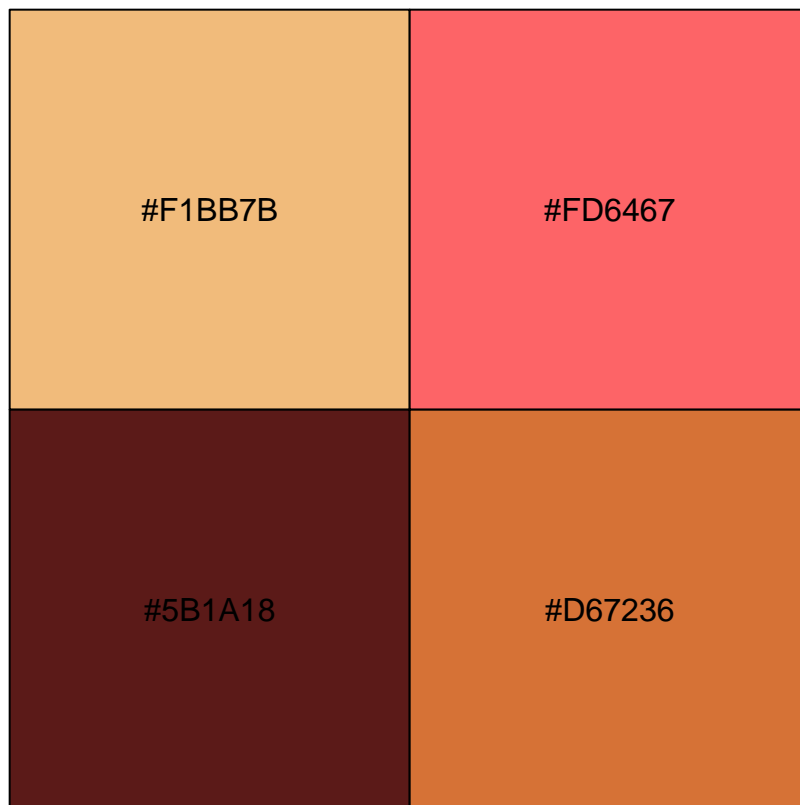
Moonrise3

```
show_col(wes_palettes$Moonrise3)
```



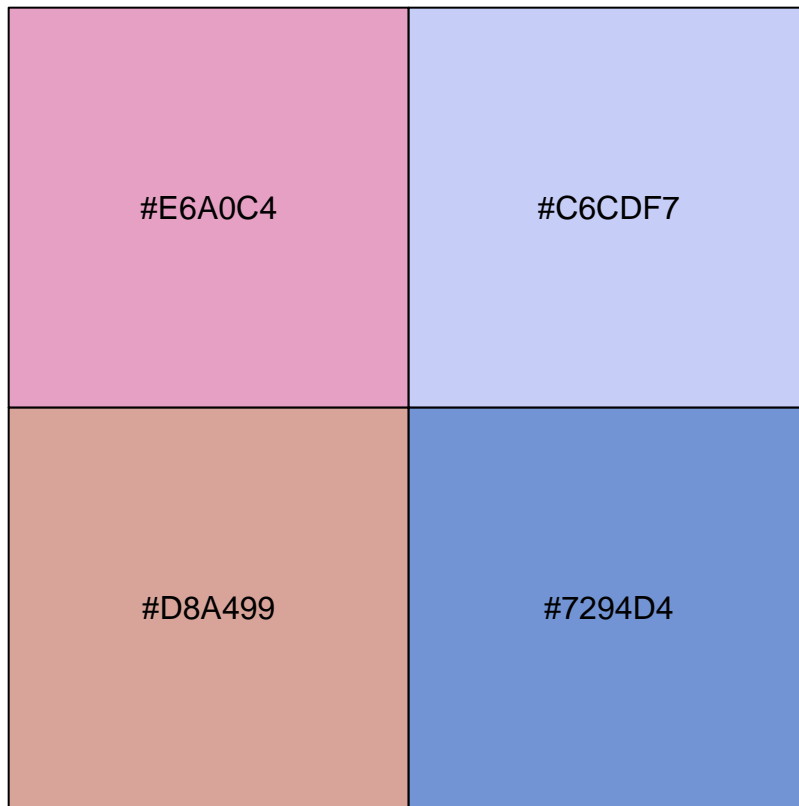
GrandBudapest1

```
show_col(wes_palettes$GrandBudapest1)
```



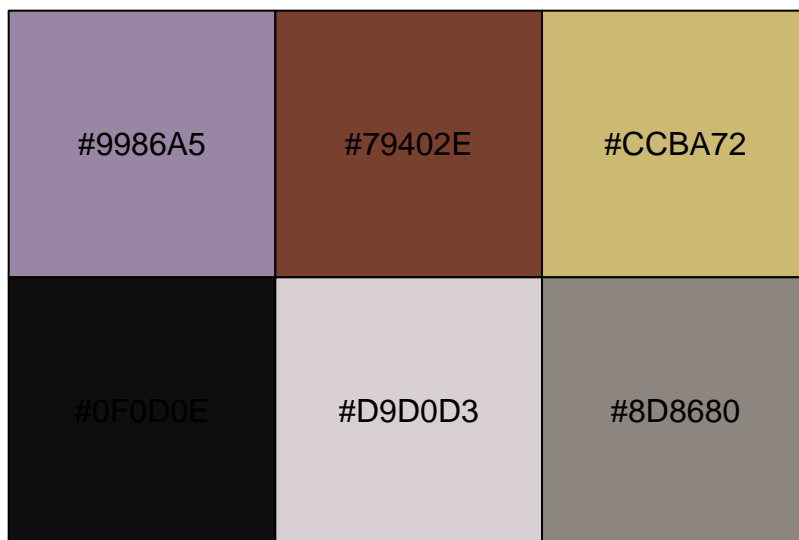
GrandBudapest2

```
show_col(wes_palettes$GrandBudapest2)
```



IsleofDogs1

```
show_col(wes_palettes$IsleofDogs1)
```



IsleofDogs2

```
show_col(wes_palettes$IsleofDogs2)
```

#EAD3BF	#AA9486	#B6854D
#39312F	#1C1718	

## References:

<https://rpubs.com/anhld/169514> <https://www.nceas.ucsb.edu/~frazier/RSpatialGuides/colorPaletteCheatsheet.pdf> <https://cran.r-project.org/web/packages/ggsci/ggsci.pdf> <http://www.sthda.com/english/wiki/colors-in-r>