

Let's master case_when()

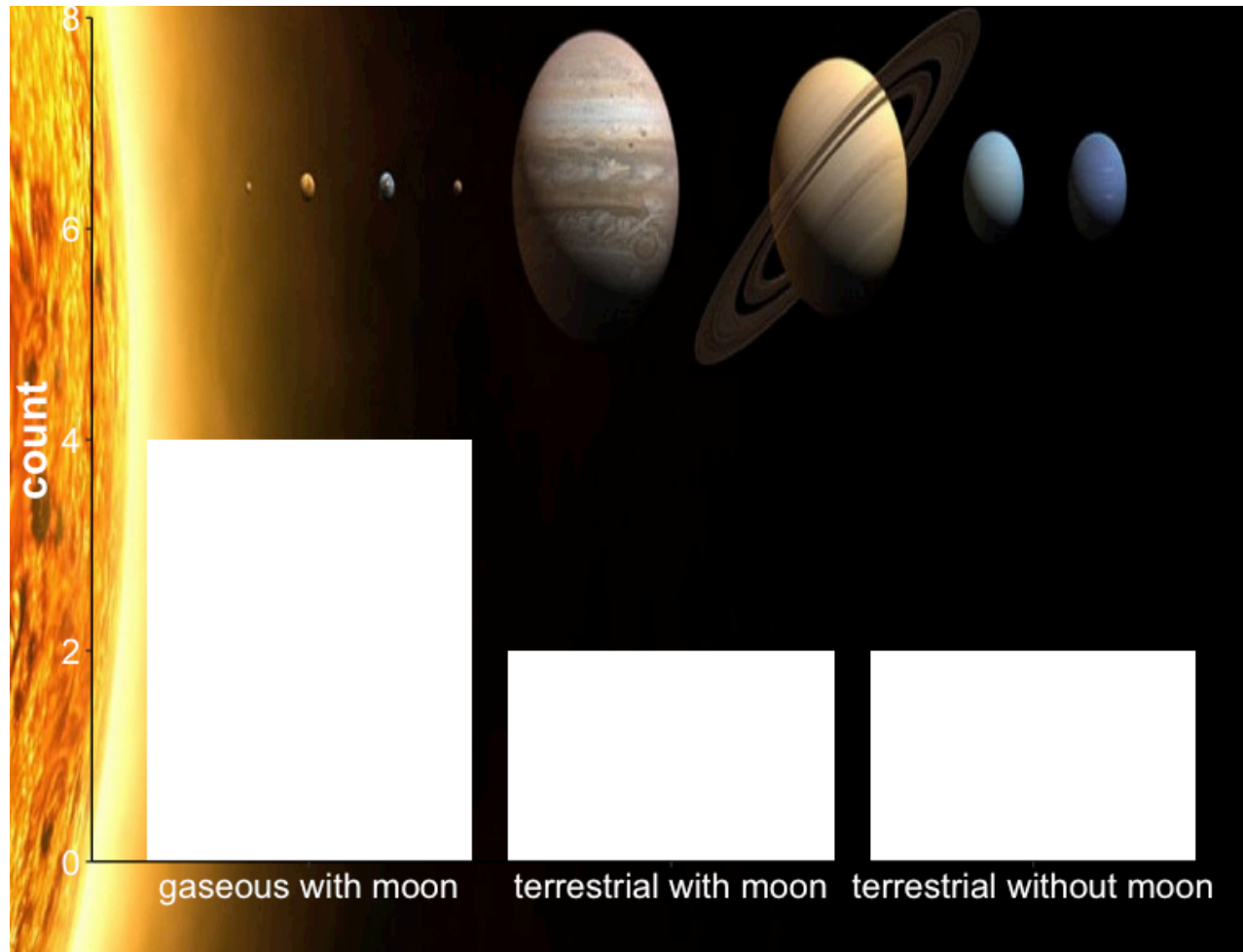
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Remember our last lesson

- Manipulation data with `if_else()`

```
data %>%  
  mutate(  
    planet_composition = if_else(ring == TRUE, "gaseous", "terrestrial"),  
    moon = if_else(num_moon > 0, "with moon", "without moon")  
  )
```

At the end of this lesson...



Remeinder:

1. Packages

- `library(dplyr)` : manipulation on data

2. Main Function

- `case_when()`

3. Operators

- `&` : and
- `|` : or
- `=` : assign values to arguments in function calls
- `==` : used for equality testing
- `>`, `<`, `<=`, `>=` : greater than, less than, less than or equal to, greater than or equal to

4. Functions in `dplyr`

- `mutate()` add column and put it a name
- `%>%` : pipe operator `x %>% f(y) = f(x,y)`

Function `case_when()`

Syntax `dplyr::case_when()`

```
my_new_vector <- case_when(  
  If TRUE { condition_1 ~ value_1,  
            condition_2 ~ value_2,  
            condition_3 ~ value_3  
  Else { TRUE ~ value_other_case  
        )  
  )
```

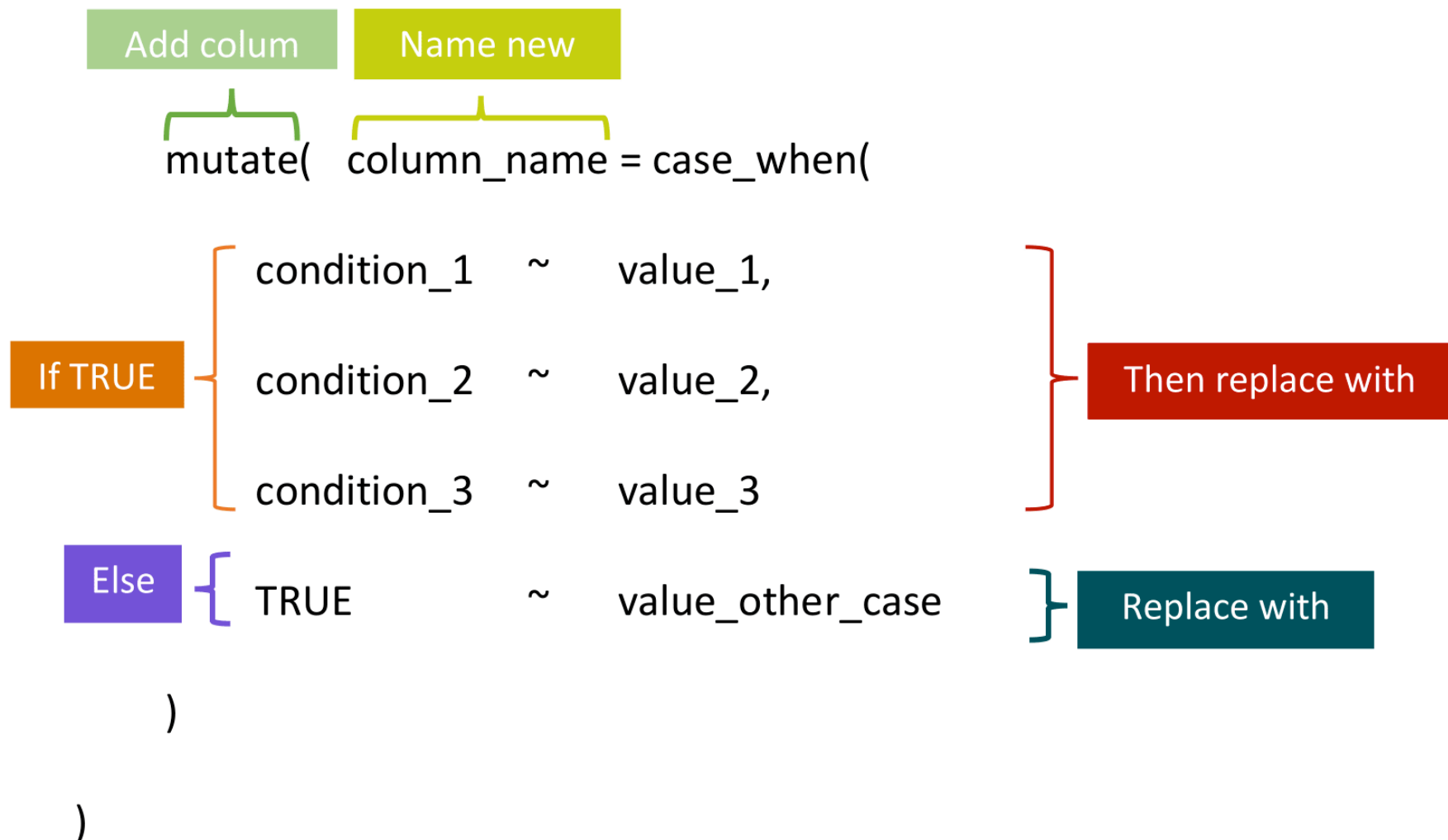
Then replace with

replace with

Function `case_when()` + `mutate()`

`dplyr::mutate()` + `dplyr::case_when()`

`datos %>%`



Live coding

```
library(tidyverse)
#Cmd/Ctrl + Option + I insert chunk
#Cmd/Ctrl + Shift + R insert section
# Pasos Previos -----
library(dplyr)
# Ejercicio 1 -----
altura <- c(1.65, 1.5, 1.25, -1.8)
altura_comp <- case_when(
  #si altura > 1.5 "alta"
  altura > 1.5 ~ "alta",
  #si altura < 0 "dato mal ingresado"
  altura < 0 ~ "dato mal ingresado",
  #si altura < 1.5 "baja"
  altura < 1.5 ~ "baja",
  #si altura = 1.5 "promedio"
  altura == 1.5 ~ "promedio"
)

# Ejercicio 2 -----
data %>%
  mutate(size = case_when(diameter == 1 ~ "normal",
                           diameter < 1 ~ "pequeno",
                           TRUE ~ "grande"))
```

Now it's your turn

THINKING...



Exercise

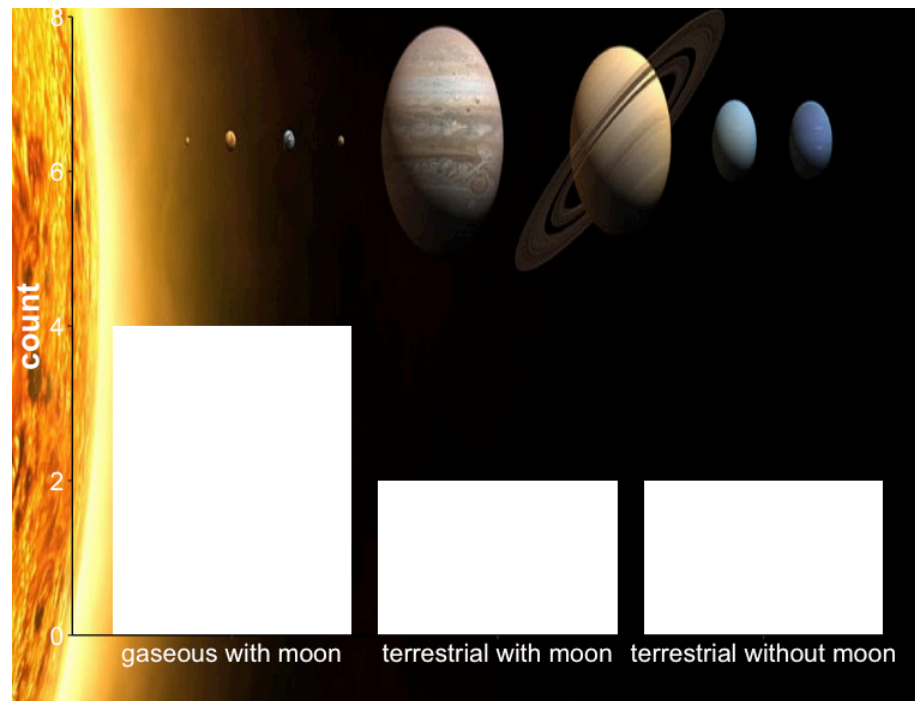
https://javierariffotorres.shinyapps.io/Prueba_formativa/

Congratulations!

You have learn a new function `dplyr::case_when()`



Homework challenge



Replicate this plot

Hints

- `require(ggimage)`
- `library(ggforce)`
- `library(janitor)`
- `ggimage::ggbackground(p, img)`, where `p` is your plot and `img = "docs/img/Planets.pdf"`

Bibliography

- R para Ciencia de Datos de Hadley Wickham