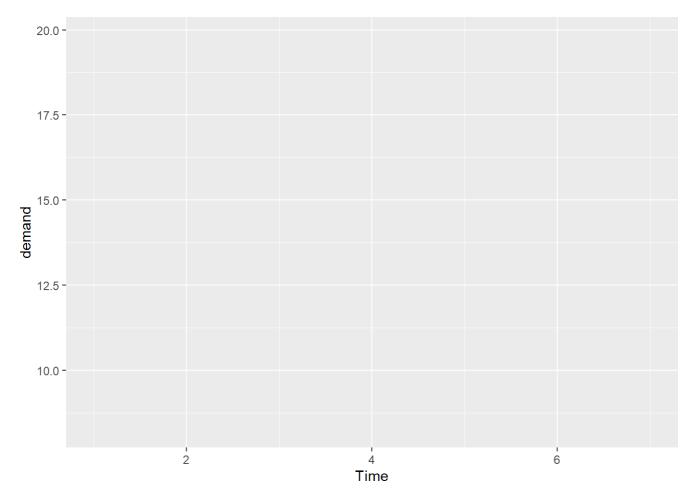
ggplot 27102023

Hannah

2023-10-27

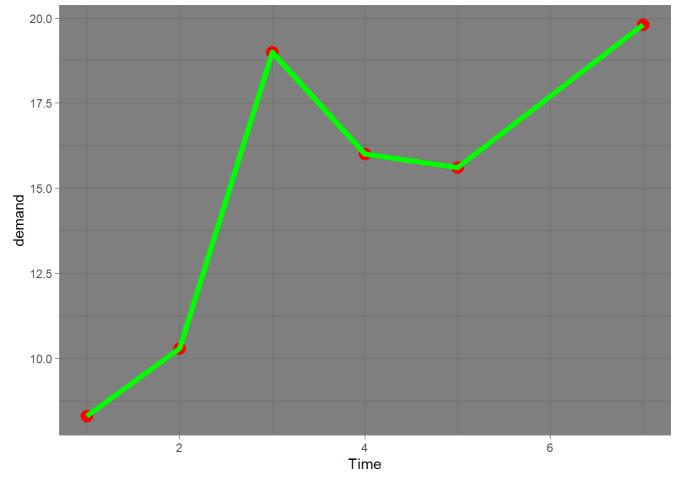
#ggplot-Grammar and Graphics We have the following points: ##data ##geometricinterpretation ##mapping(aesthetics) ##statistics ##facet ##coordinatespace ##labels ##theme

```
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
##
library(ggplot2)
library(hflights)
BOD #to check the data
##
    Time demand
## 1
        1
            8.3
        2
            10.3
           19.0
## 3
        3
          16.0
## 4
        4
        5
           15.6
## 5
            19.8
## 6
#to create space for the graph
ggplot(BOD,aes(Time,demand))
```



```
#or
BOD%>%
    ggplot(aes(Time,demand))+
    geom_point(size=4,color="red") +
    geom_line(size=2,color="green")+
    theme_dark()
```

```
## Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
## i Please use `linewidth` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

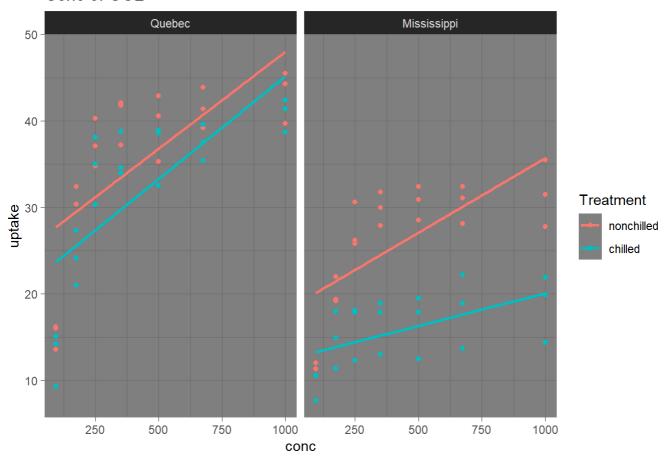


###exampleofco2

```
CO2%>% ggplot(aes(conc,uptake,color=Treatment))+
    geom_point()+
    geom_smooth(method=lm,se=F)+
    facet_wrap(~Type)+
    labs(title="Conc of CO2")+
    theme_dark()
```

```
## `geom_smooth()` using formula = 'y ~ x'
```

Conc of CO2



#se represents standard error
#lm means linear model