

2022/1/28 Lec 03

Data Viz MD Ch 2

Def: Grammar of
Graphics

It is a theoretical
definition of a graphic

A statistical graphic is
a **mapping** of **data**
variables to **aesthetic**
attributes of
geometric objects.

Ex: Tax data ^{name of data set} set

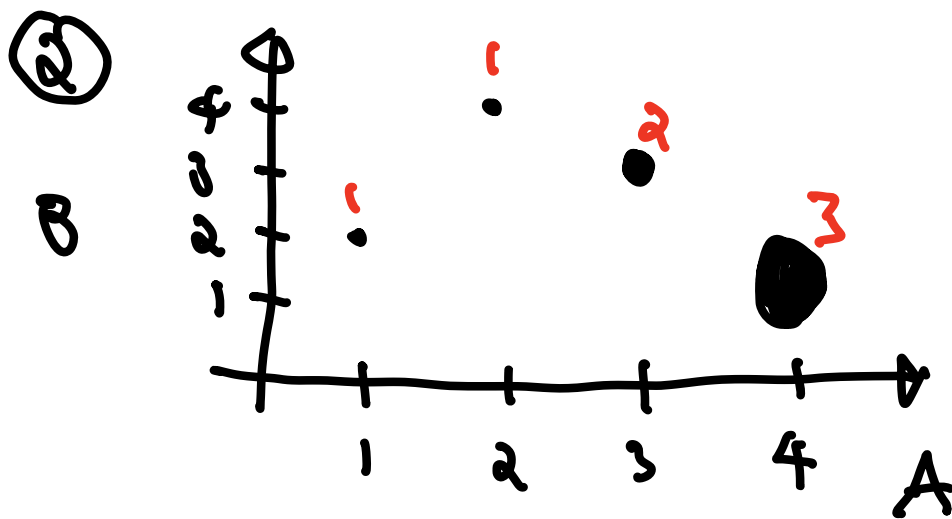
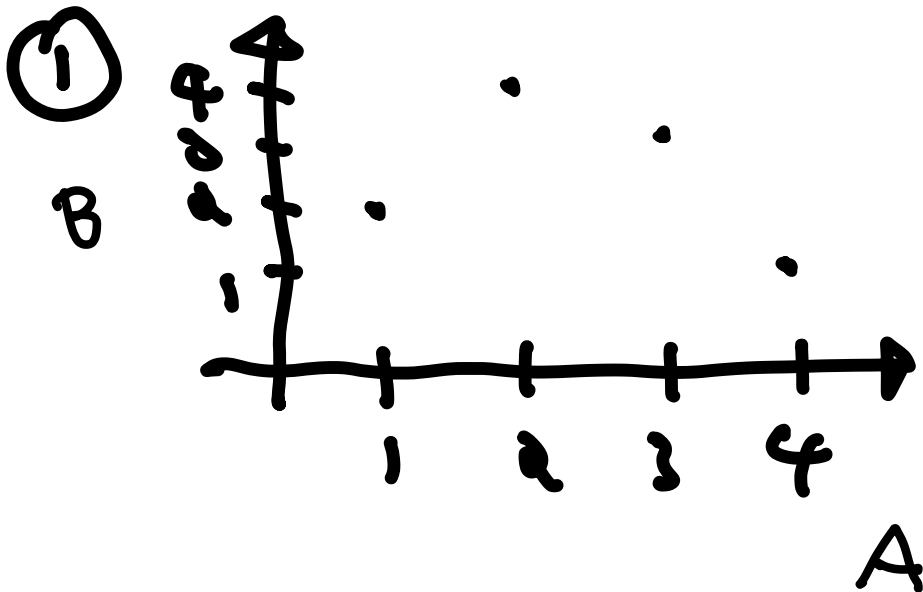
A	B	C	D
1	2	1	hot
2	4	1	hot
3	3	2	cold
4	1	3	cold

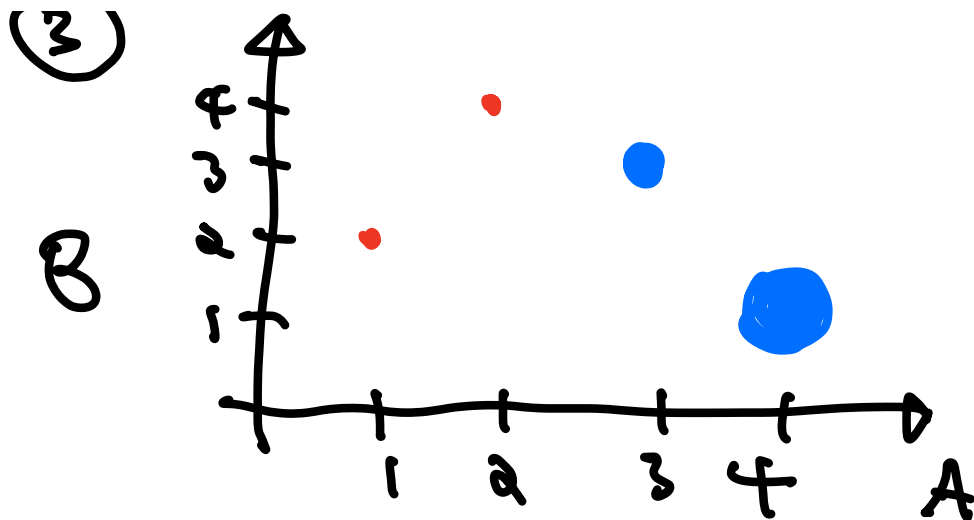
To do:

- ① Draw a scatter plot with A mapped to x-axis position, & B mapped to y-axis position
- ② Same as ① but with C mapped to

③ Same as ① & ②, but
 with D mapped to
 color.

Answers





Msg 1: We are visualizing
4 variables on
a 2D page

Code: To create viz #①
using the ggplot2 R
package for data viz.

grammar of graphics

library(ggplot2)

ggplot(data = Toy, ^{name of data set})

mapping = aes(x=A, y=B) +

~~geom_point()~~
are attributes
Ex: x, y
position,
size, color
object type

Wq: What's in red here is
in red in grammar
of graphics definition.