

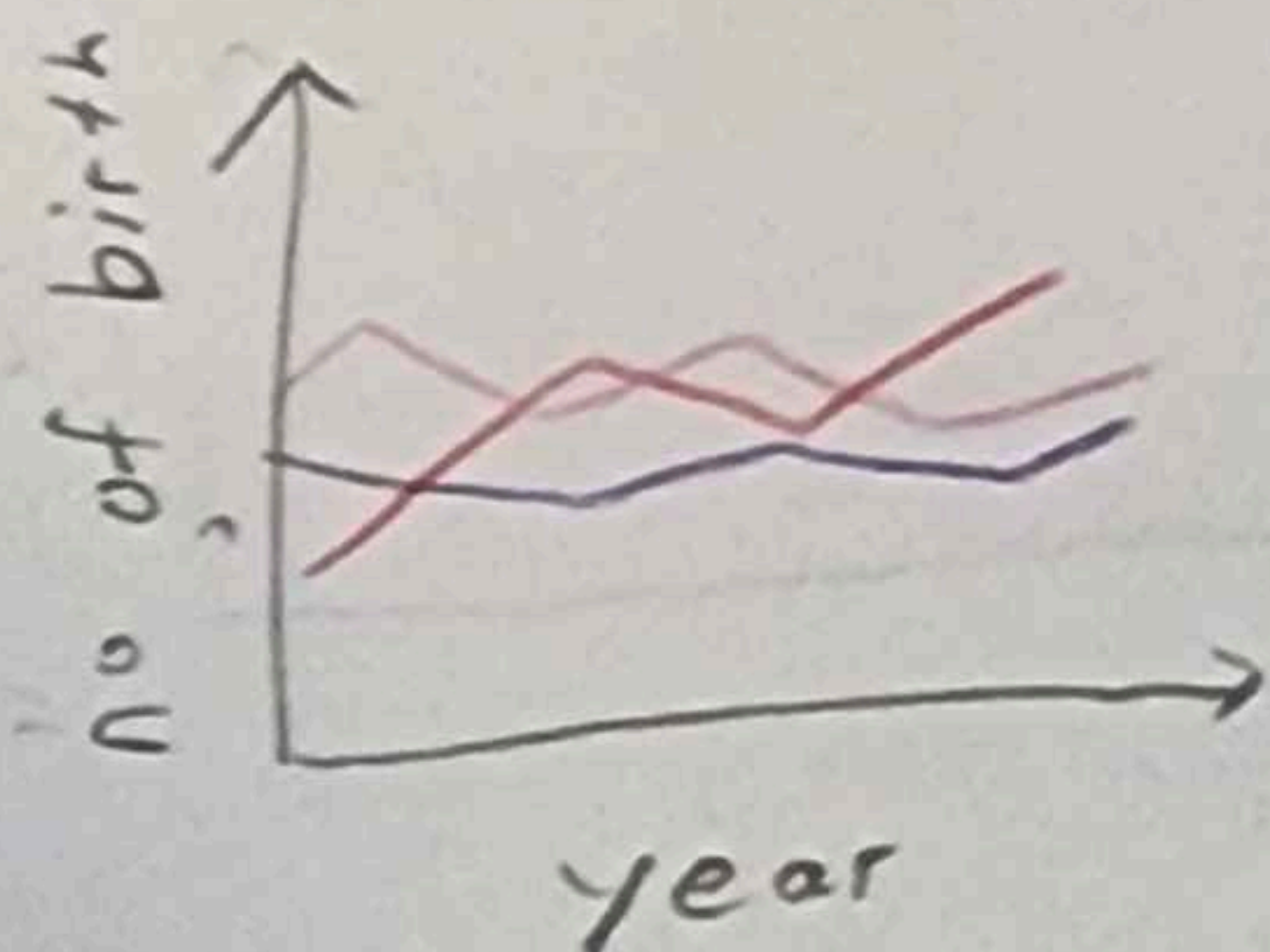
SHEET 1

1. IDEAS

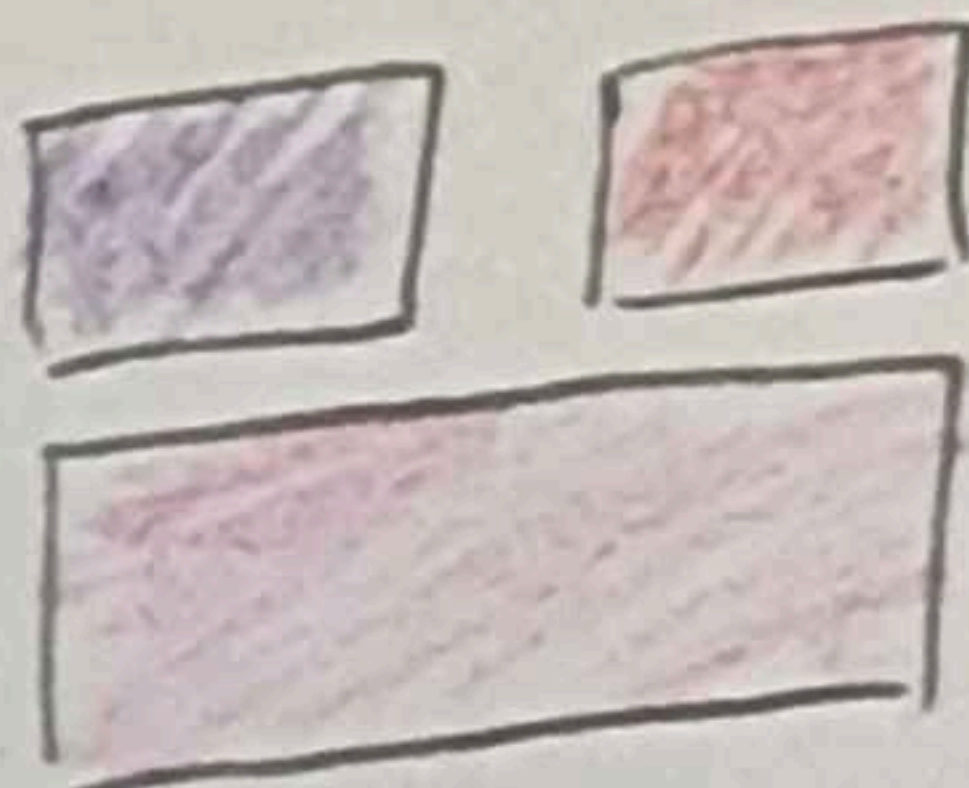
trends to consider

gender
↑
birth rate over time
↓
state
geographical trend

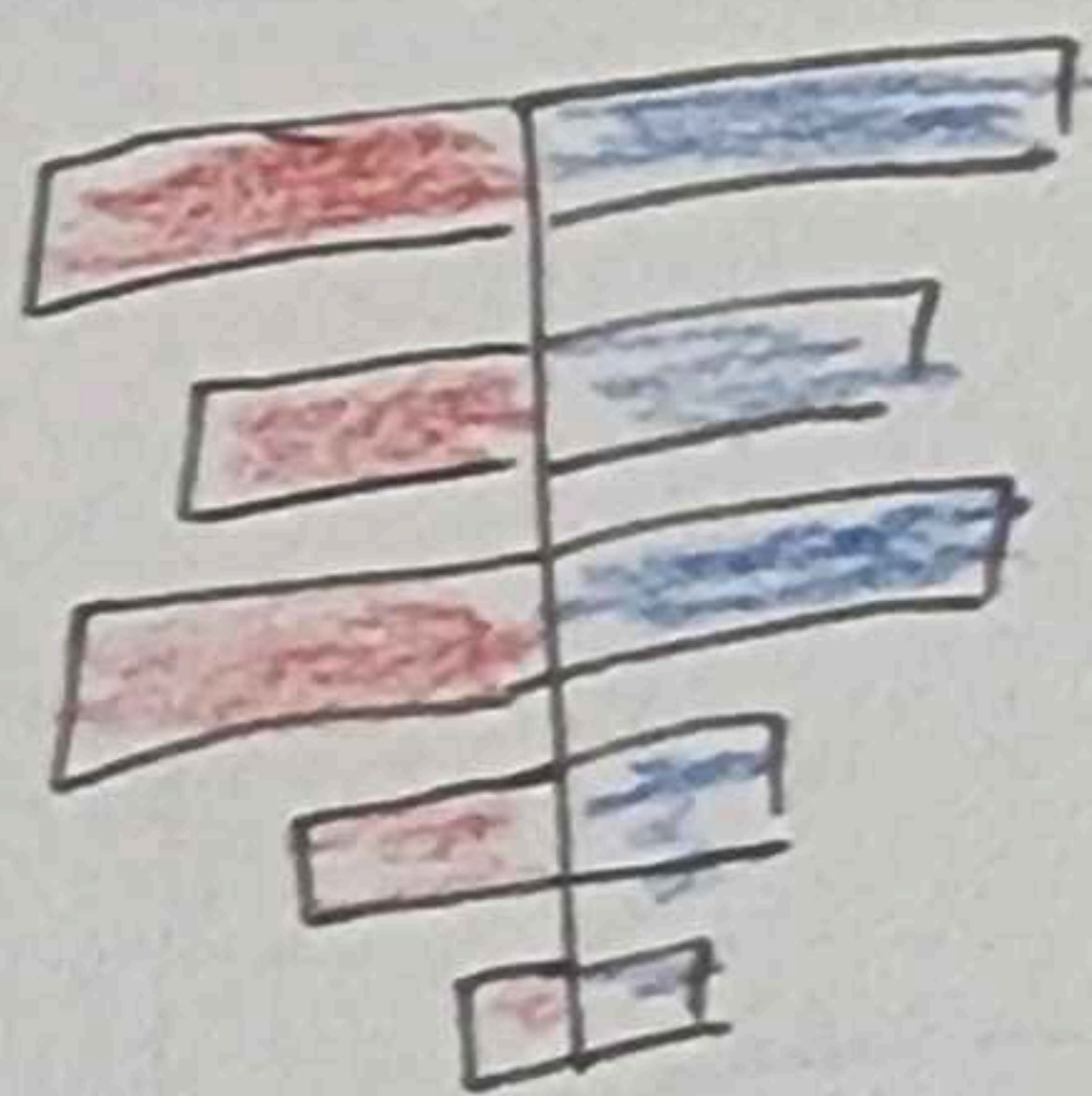
time series graph



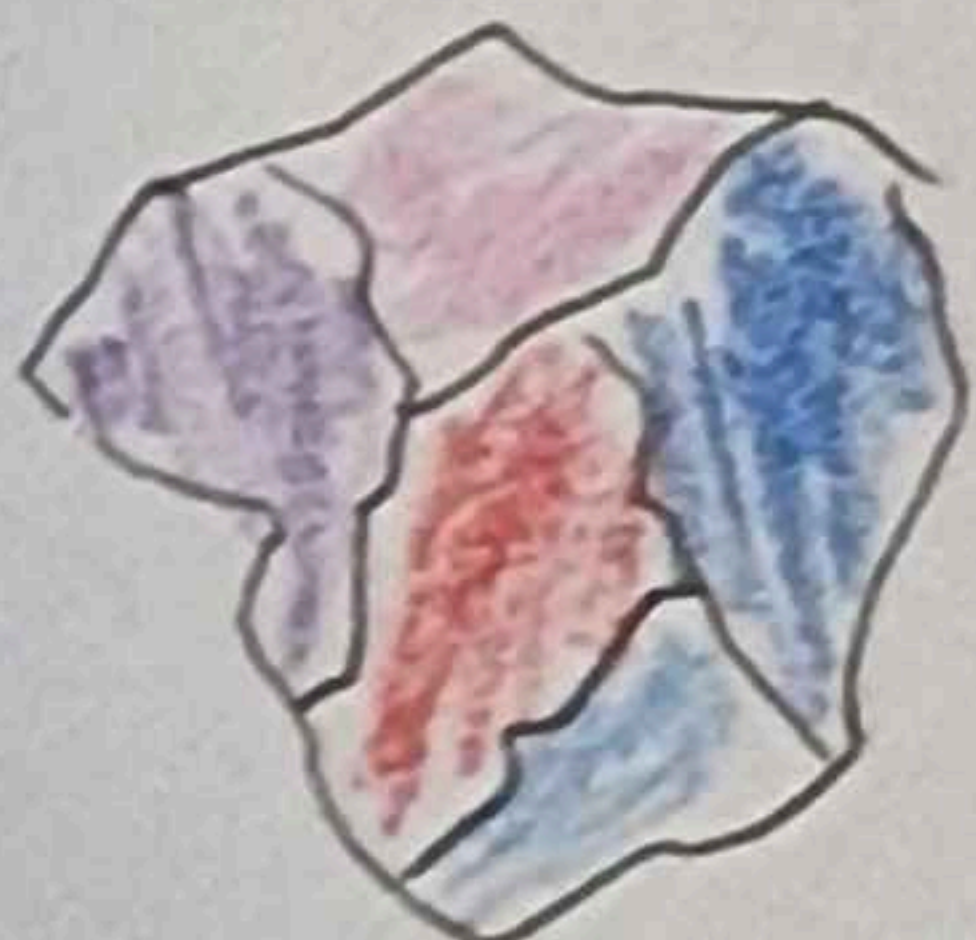
tree map



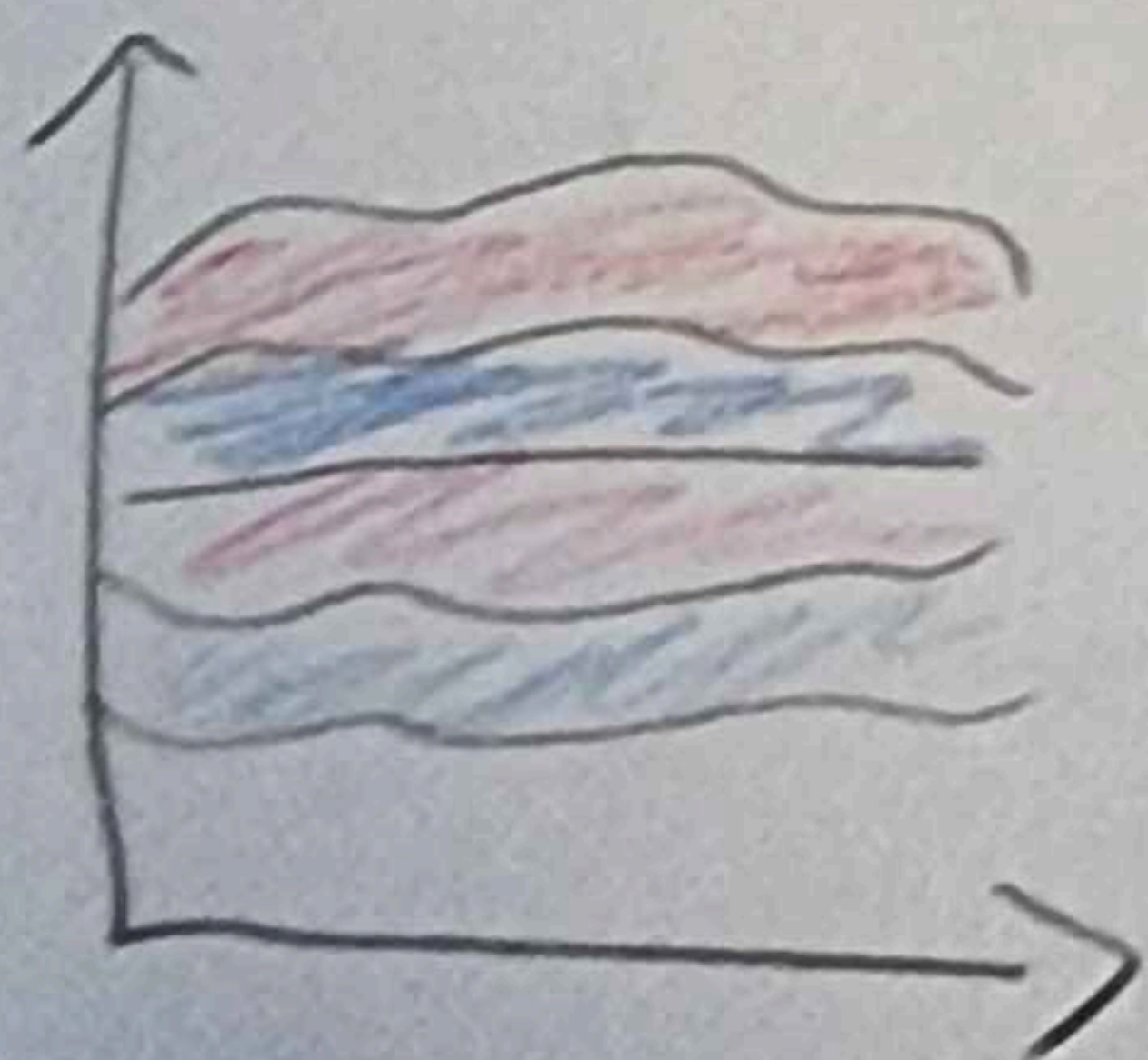
Diverging stacked bar chart



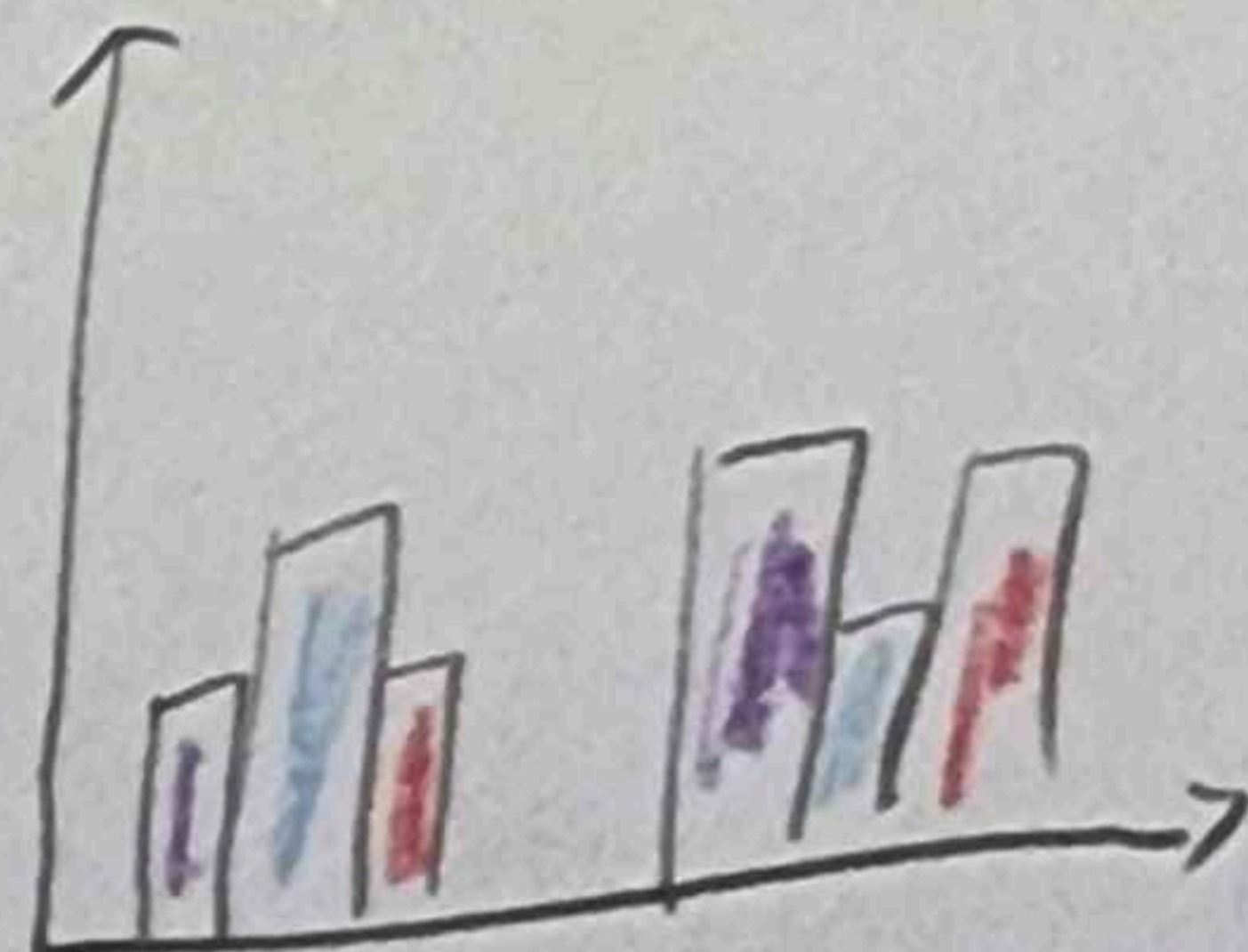
geographical



stream graph

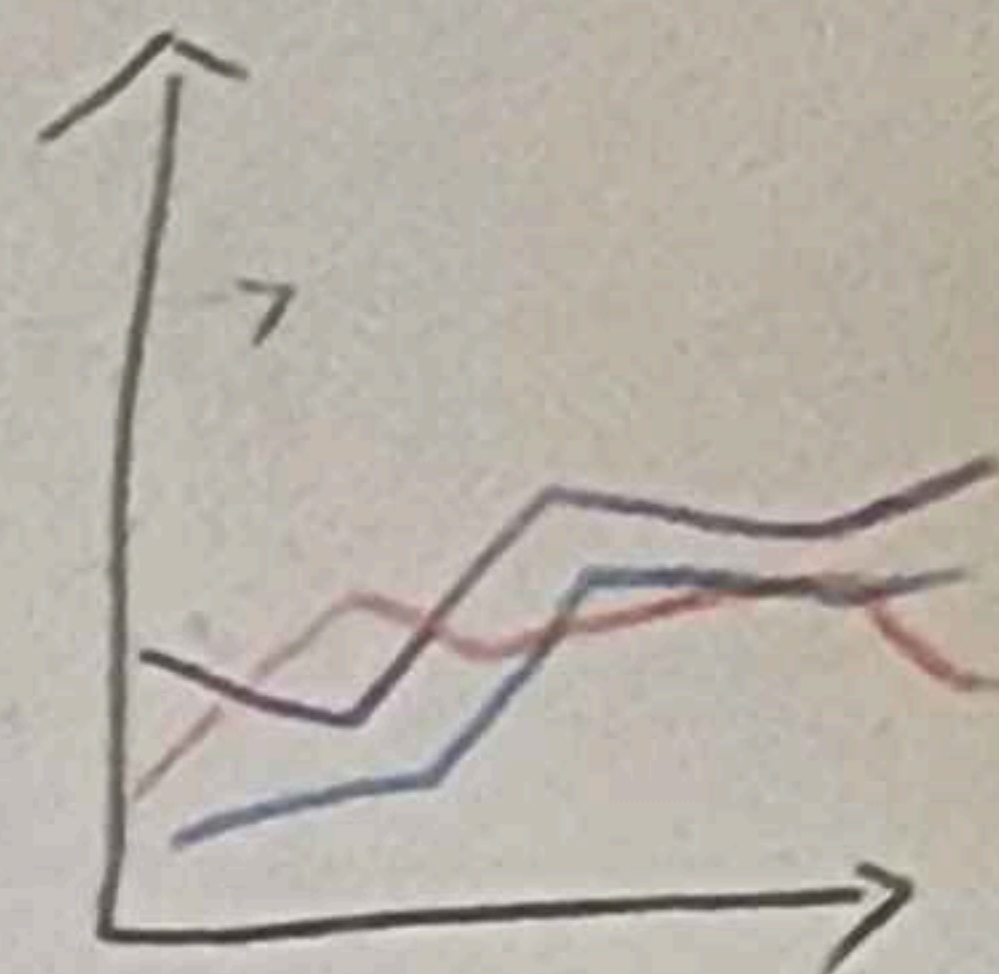


Comparative bar chart

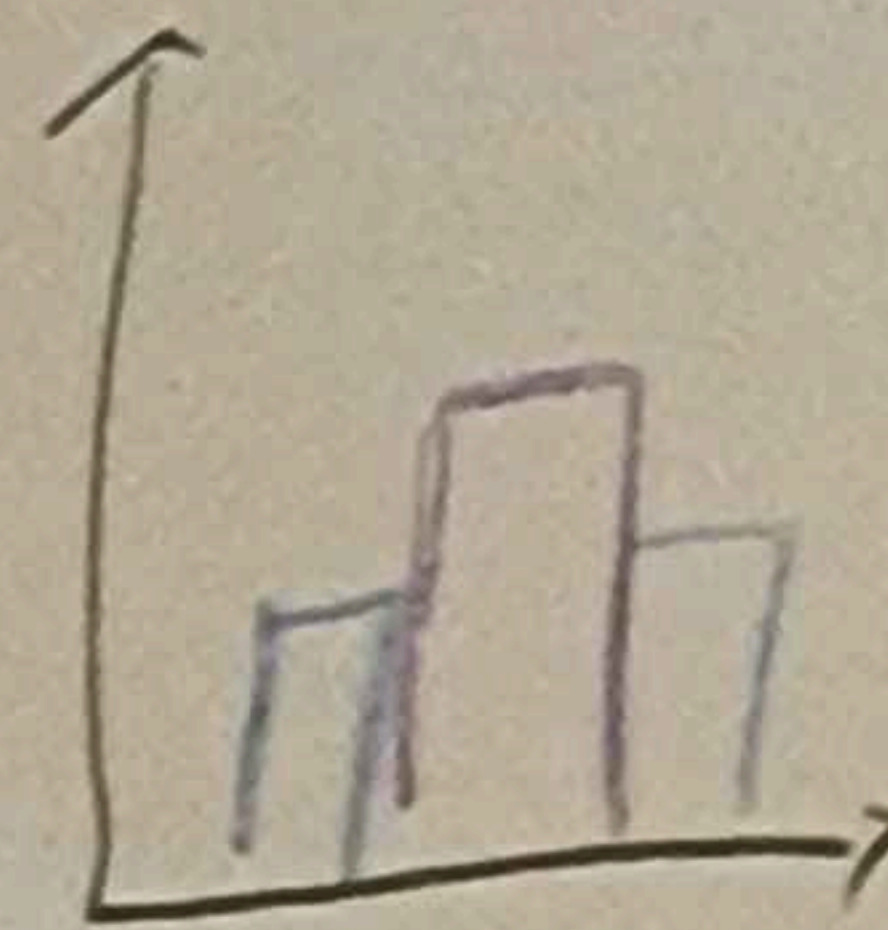


2. Filter

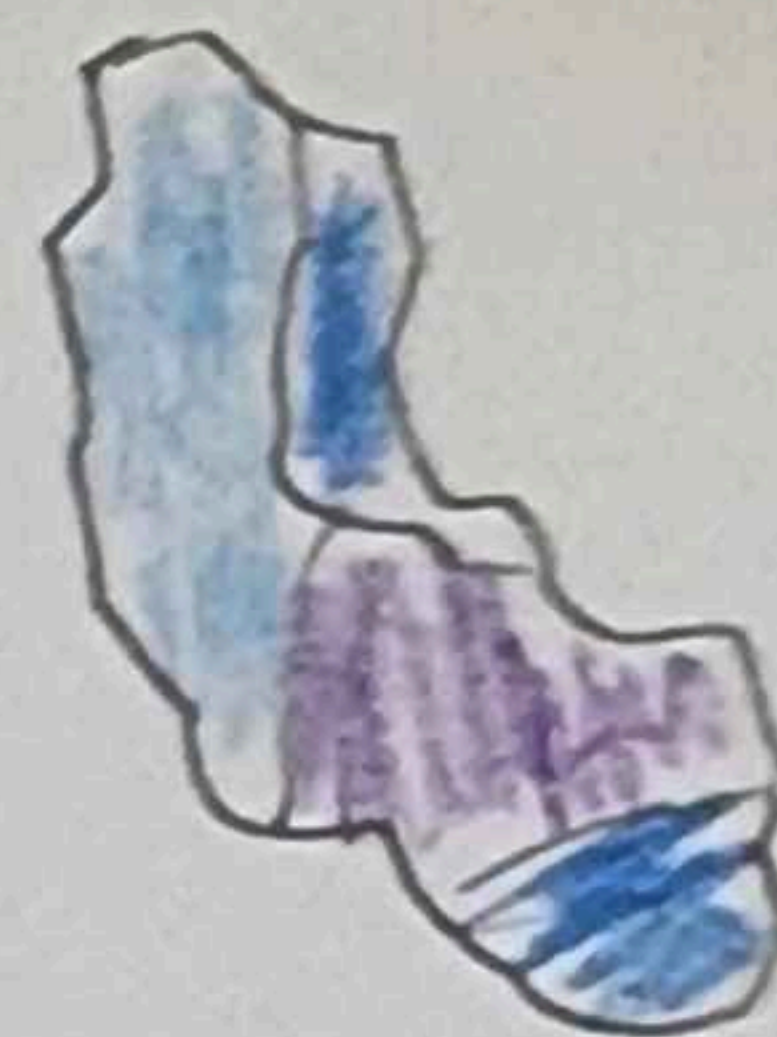
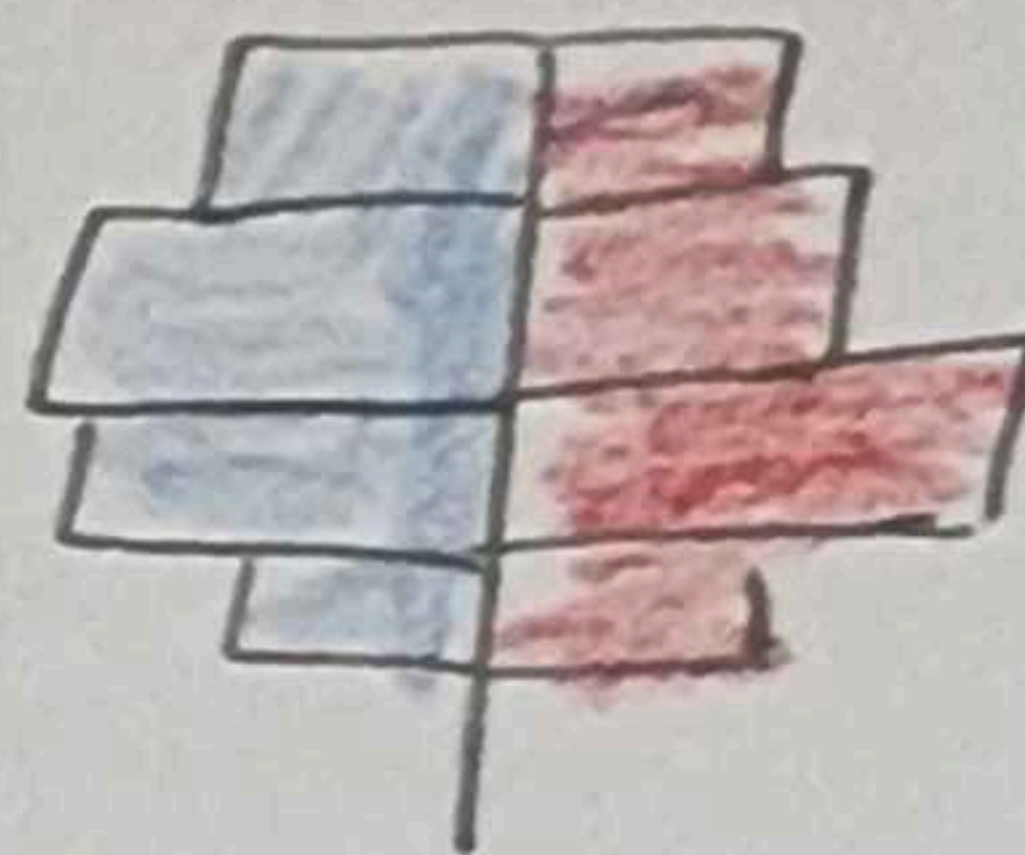
Changes over time



Comparison



Compare gender



Categorise

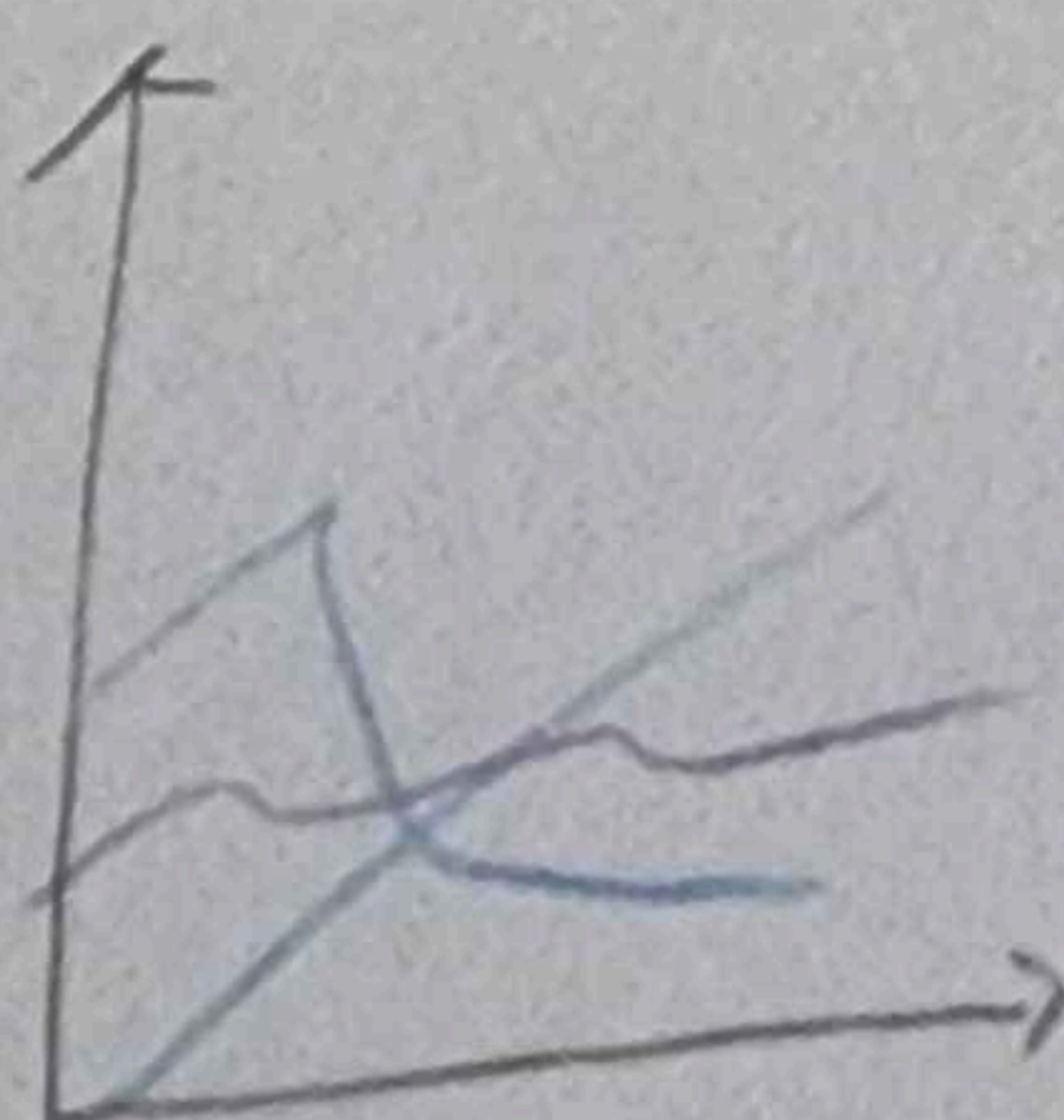
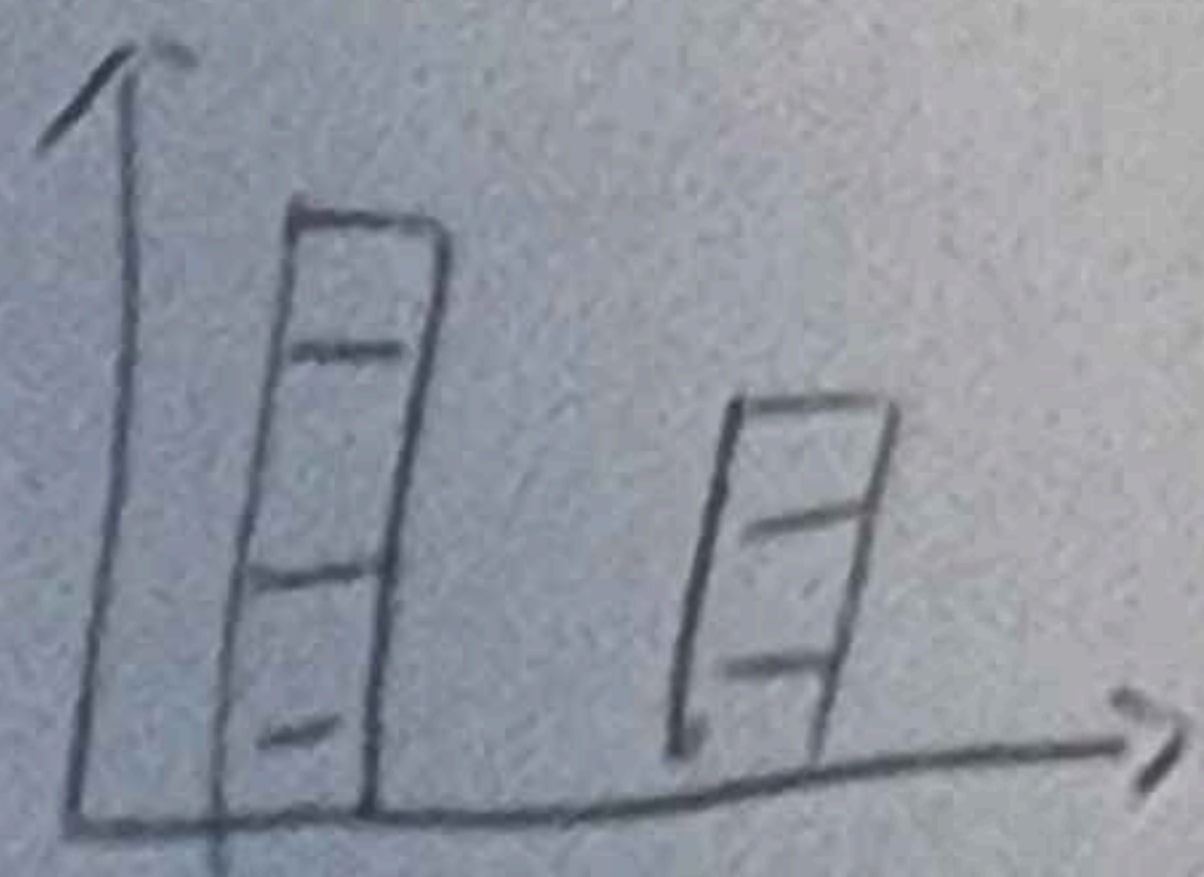
time frame

Categorical Companion

Birth data

geo spatial

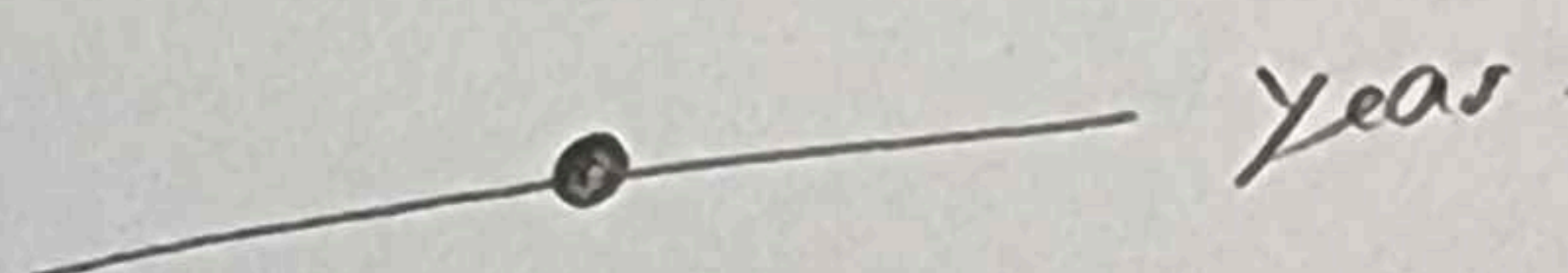
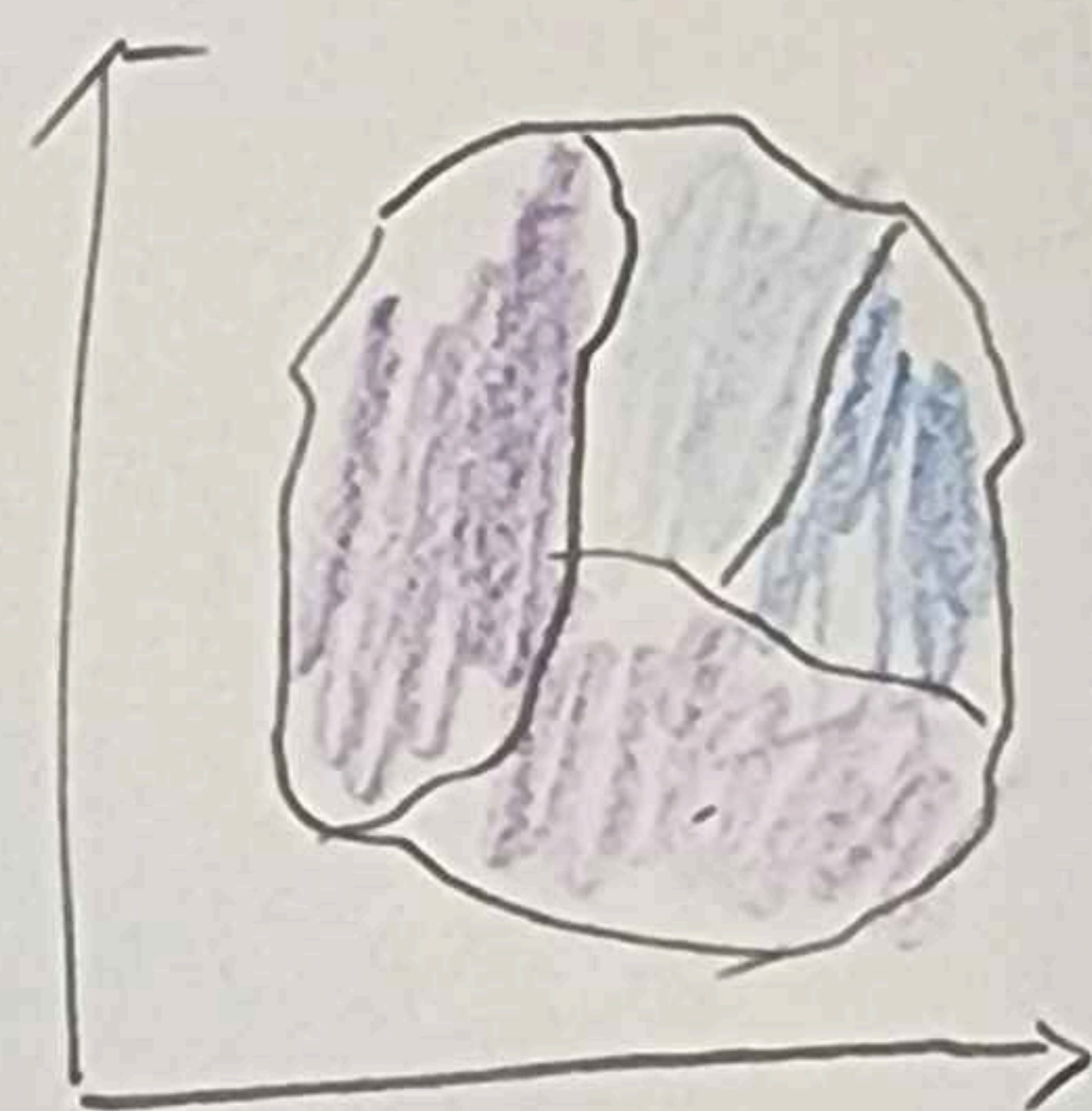
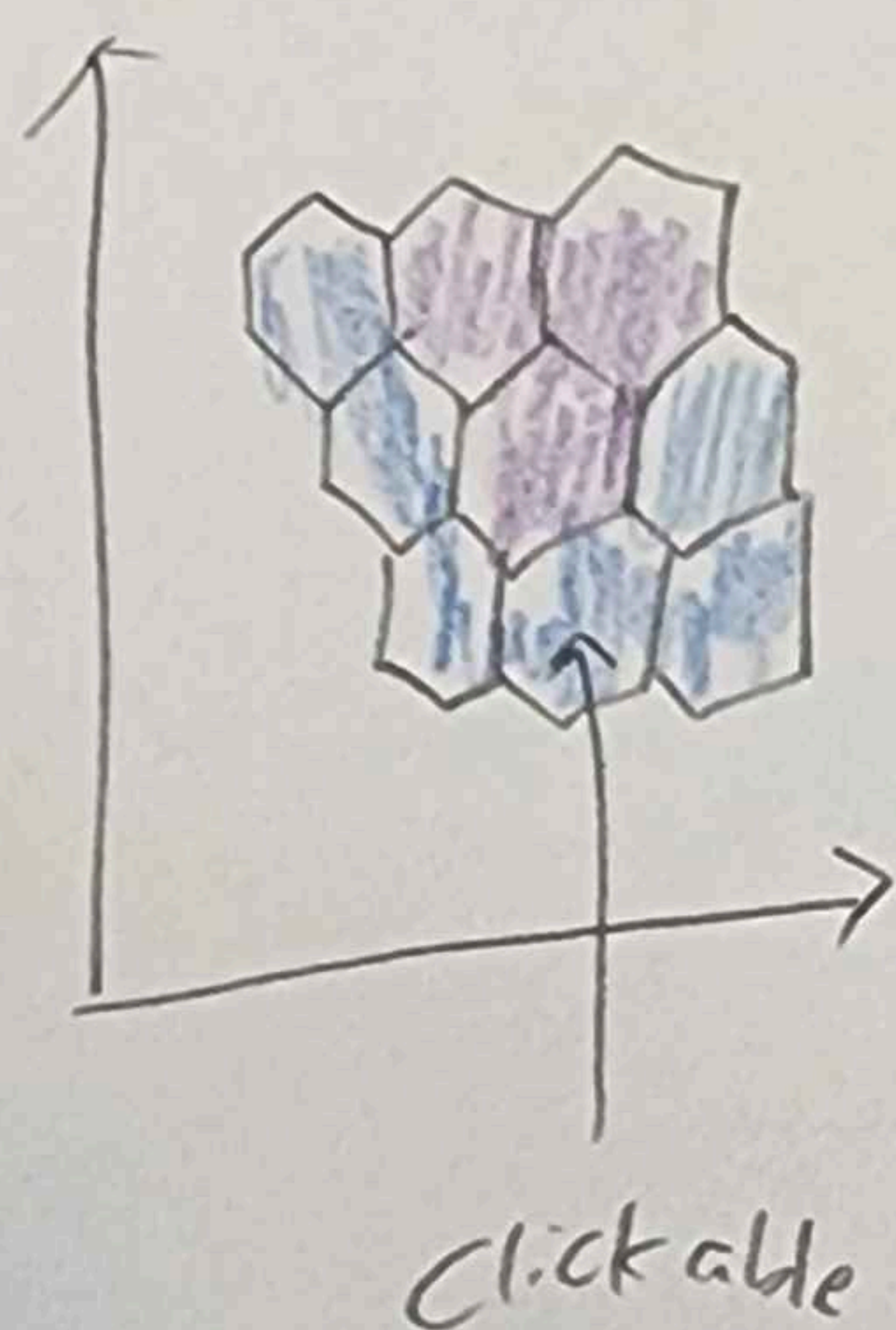
Combine and refine.



5 questions.

1. birth rate trend
2. birth rate distribution
3. birth rate by gender distribution
4. How birth rate trend change over time across state
5. What are the key patterns in data

LAYOUT



Title: Birth rate for each state in Malaysia

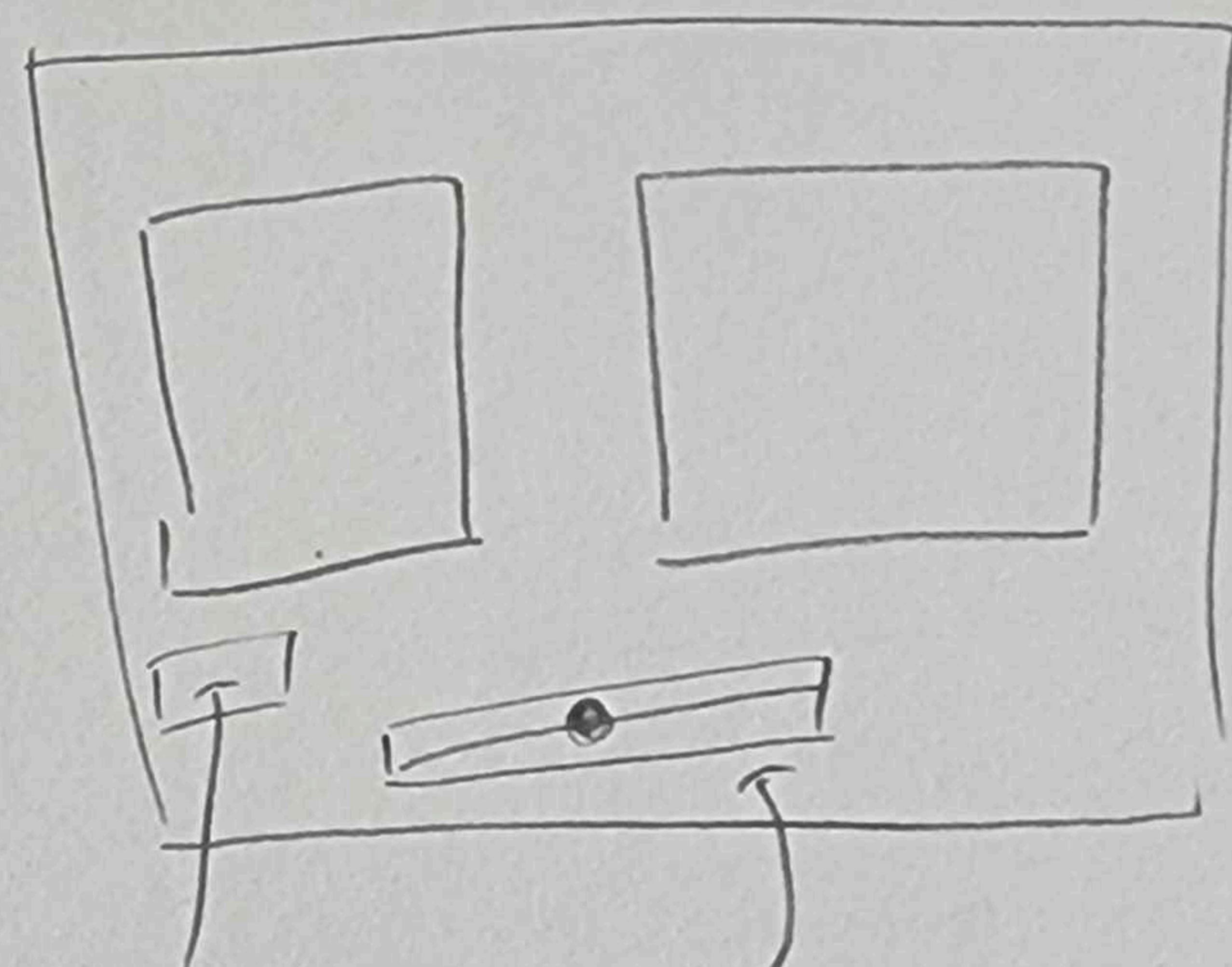
Author: Chua Xian Loong

Date: 1/10/2024

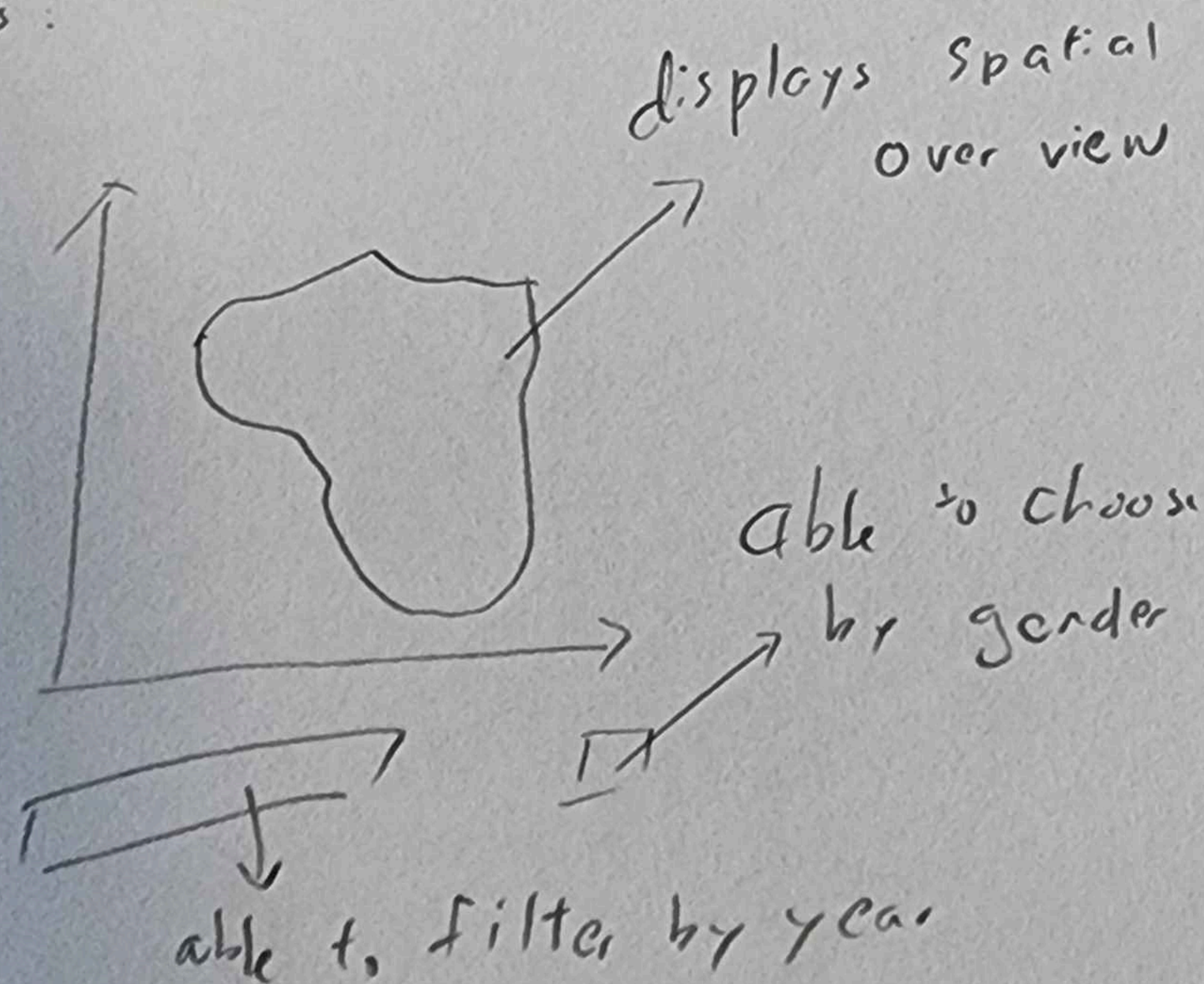
SHEET: 2

TASK: geospatial comparison

Operation:



Focus:

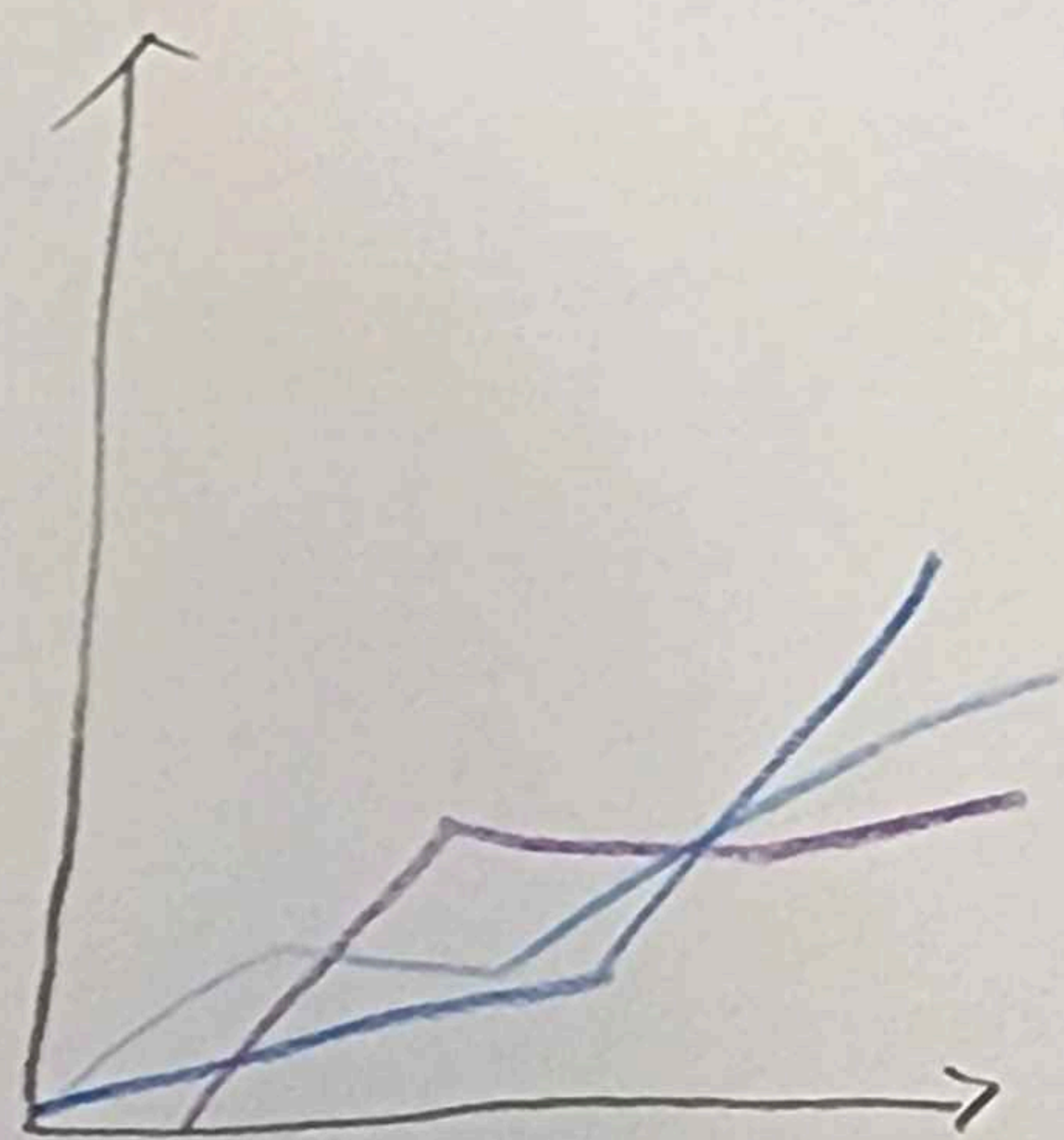


Discussion

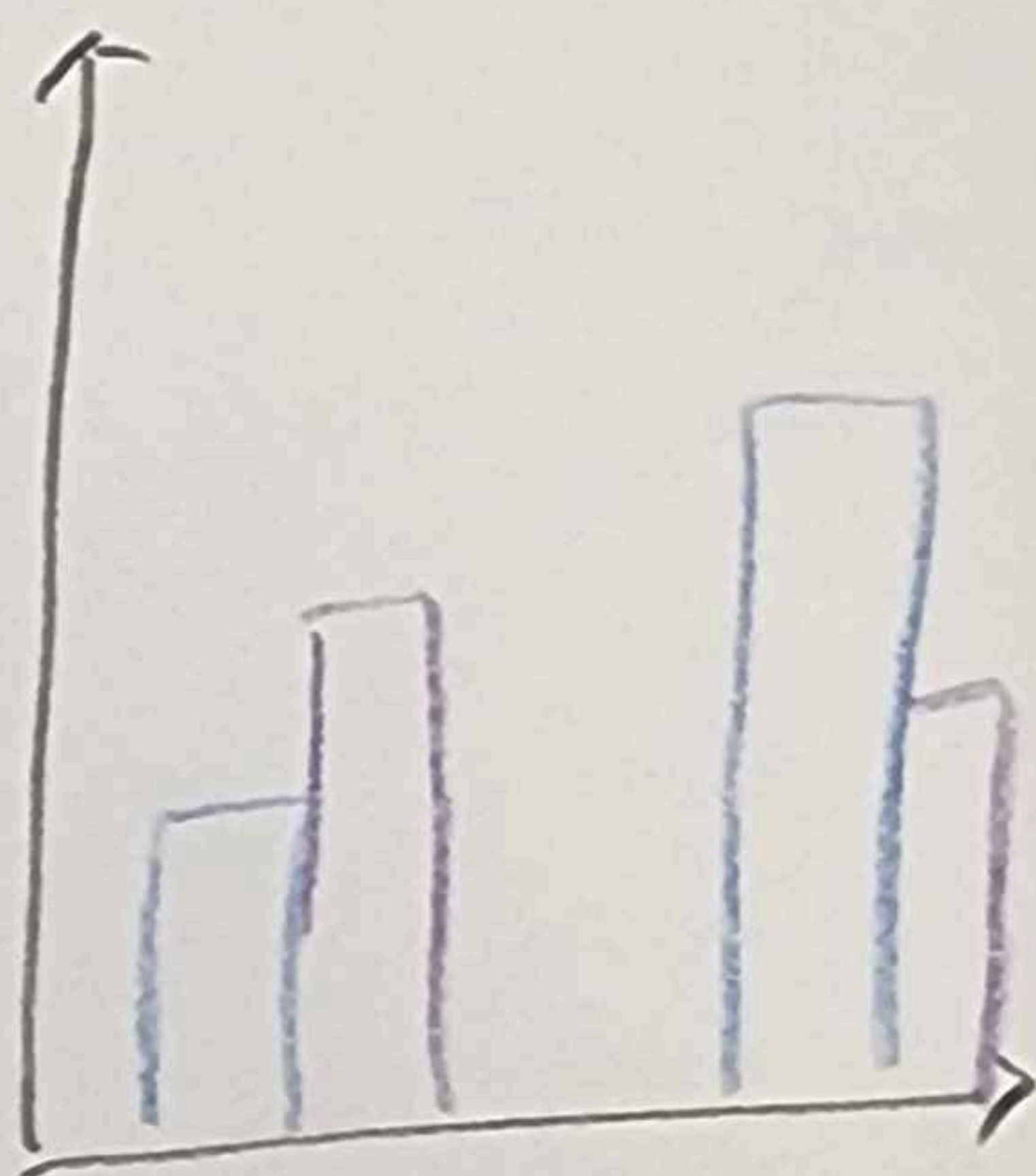
Advantages:

- Geographical context
 - Clear regional insight
 - Scalable.
- disadvantages:
- Hard to compare over time.

LAYOUT



Gender



time period.

Title: Number of birth by
State in Malaysia over time.

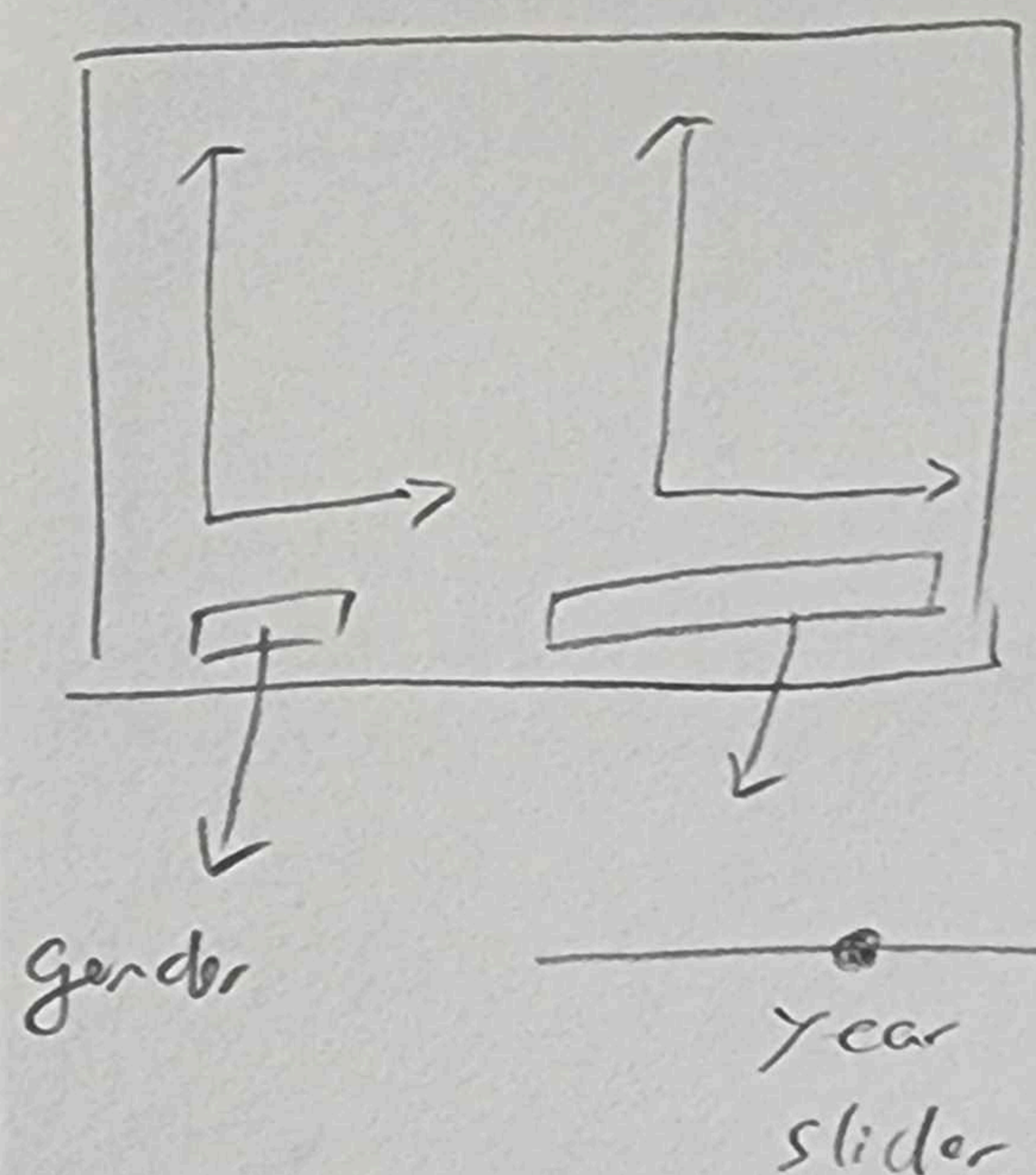
Author: Chua Xian Loong

Date : 01/10/2024

SHEET : 3

Task : Comparison over
time

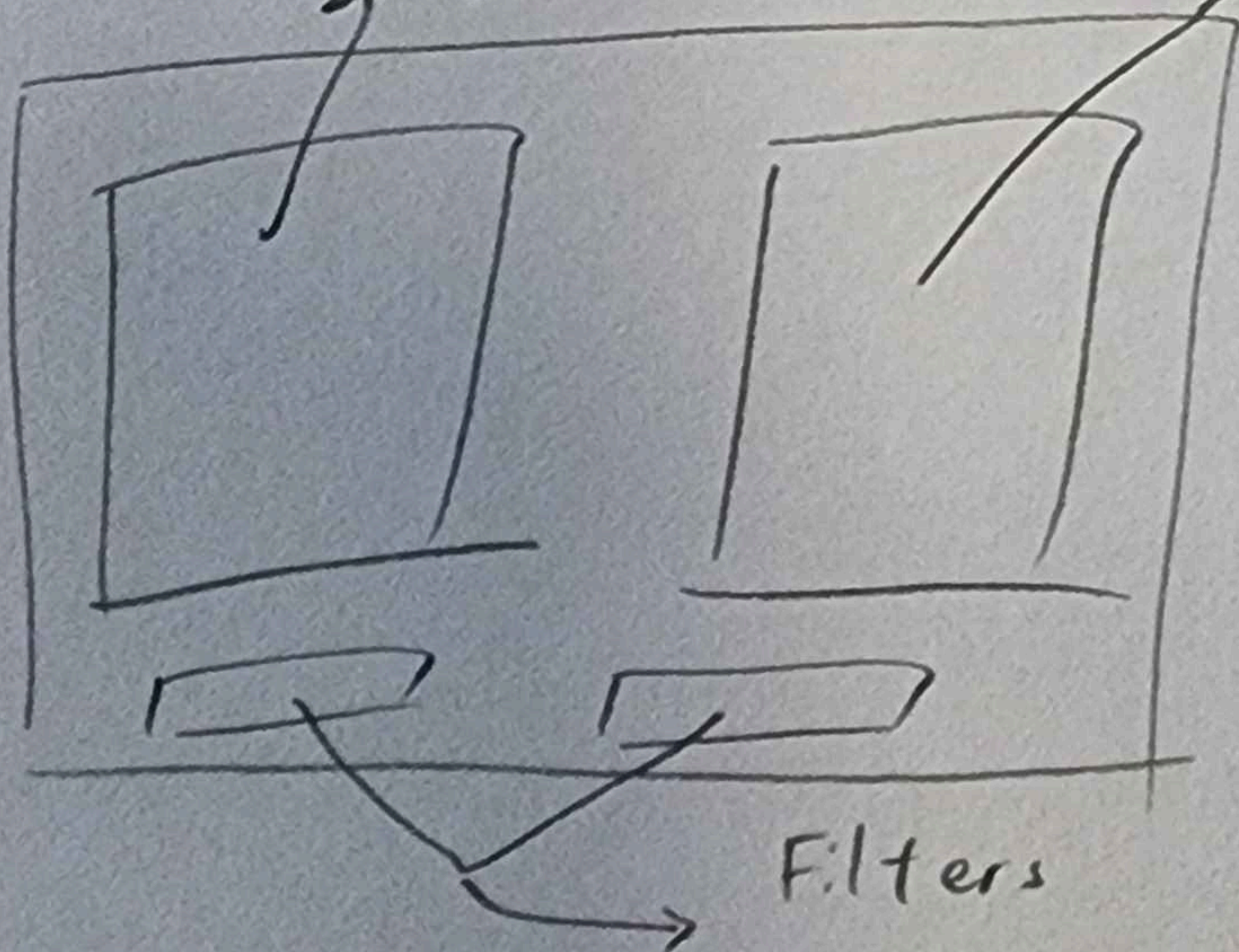
Operation :



Focus :

displays trends
over time

Compares
birth rate
with state



Discussion

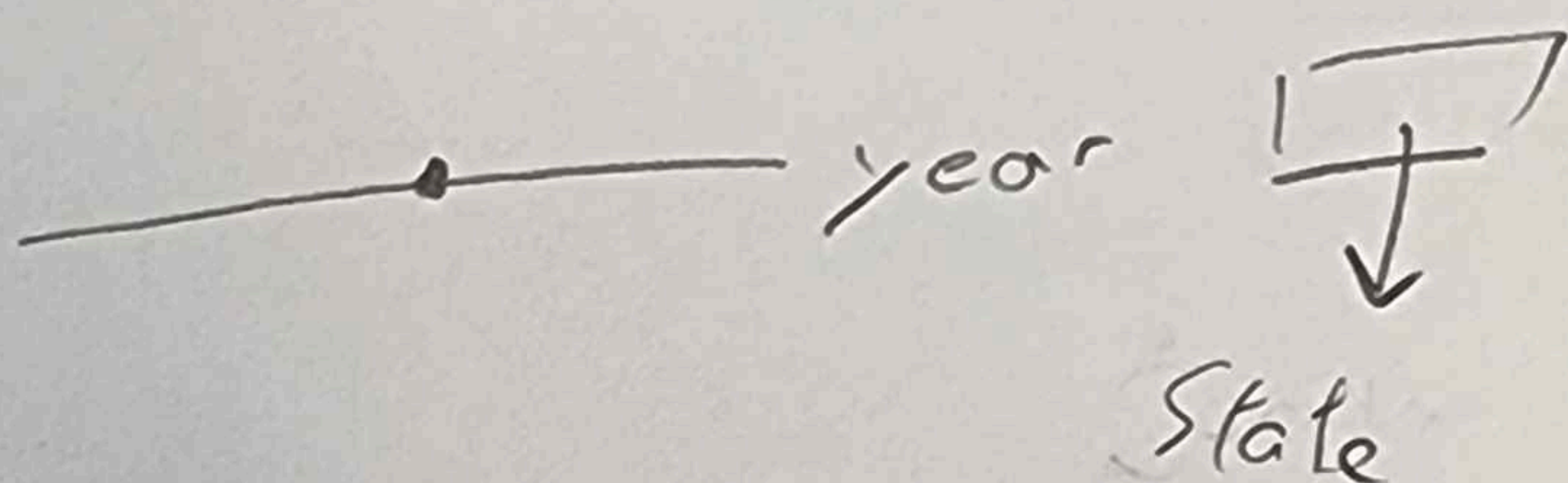
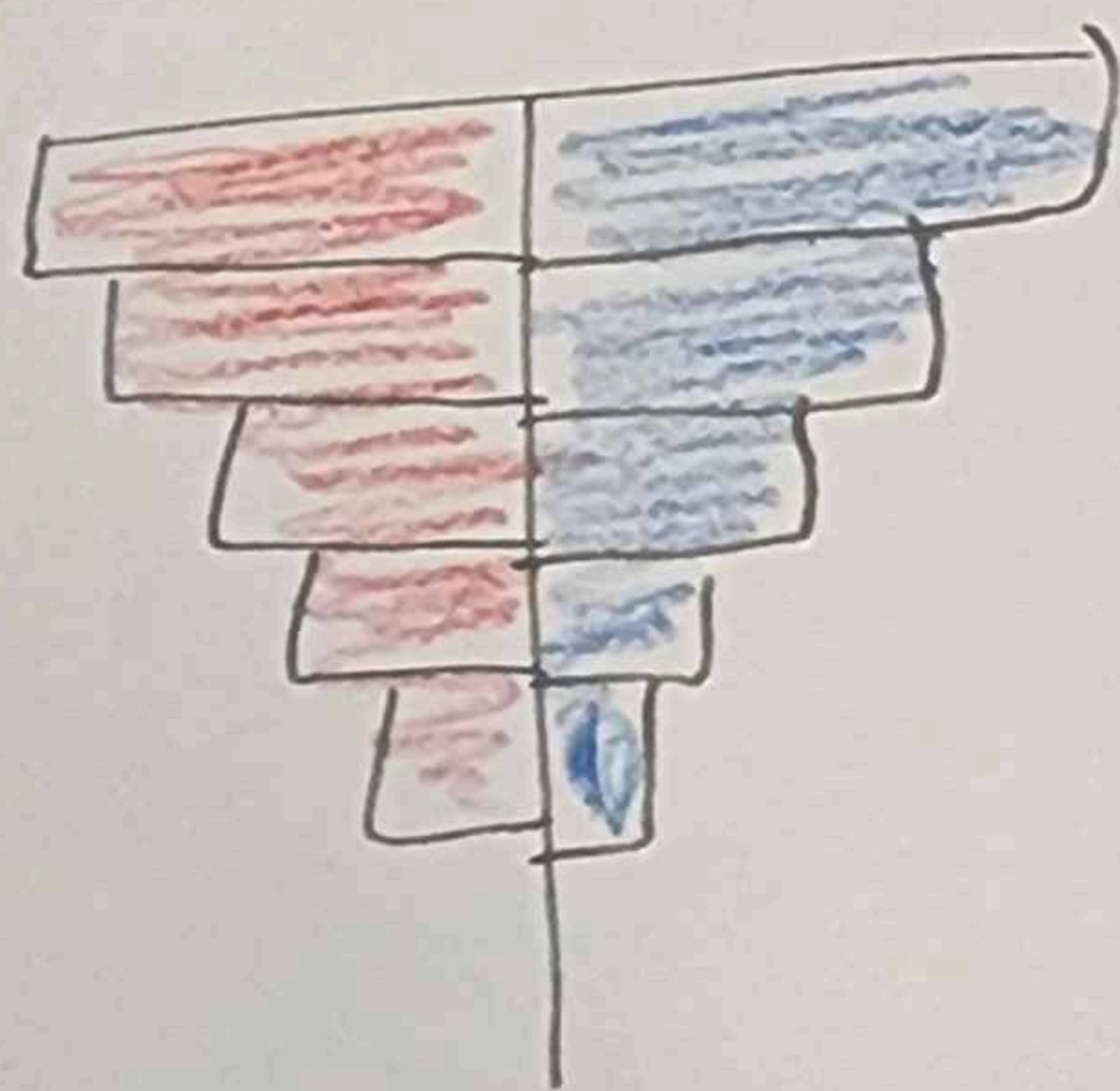
Advantage

- Clear representation over time trends.
- Good for detailed comparison.
- Precision.

Disadvantages

- Overcrowded with many states.

| A Y O U T



Title: gender distribution
of birth by state.

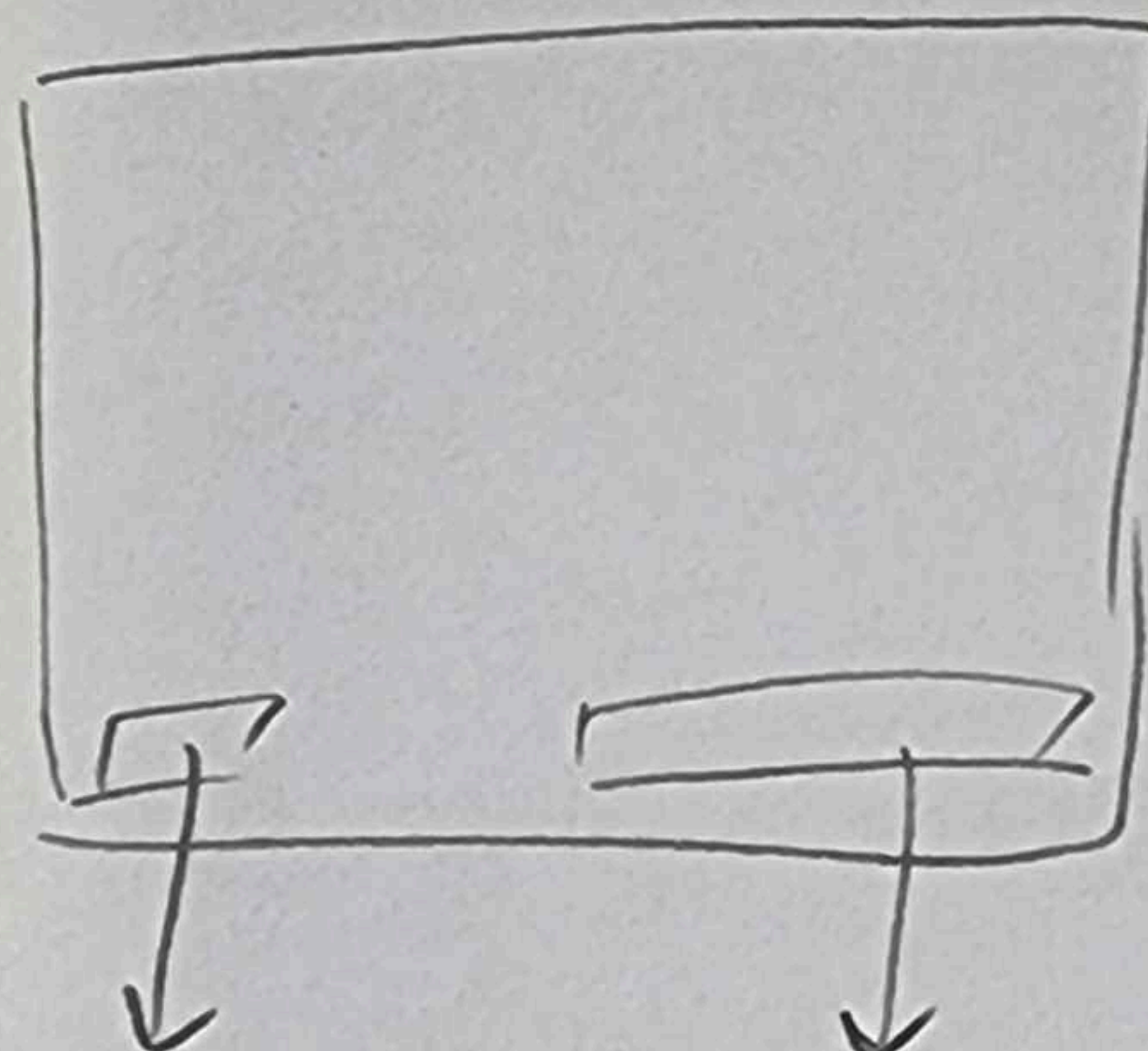
Author: Chua Xian Loong

Date: 02/10/2024

SHEET: 4

TASK: Comparison of birth
rate by gender

Operations

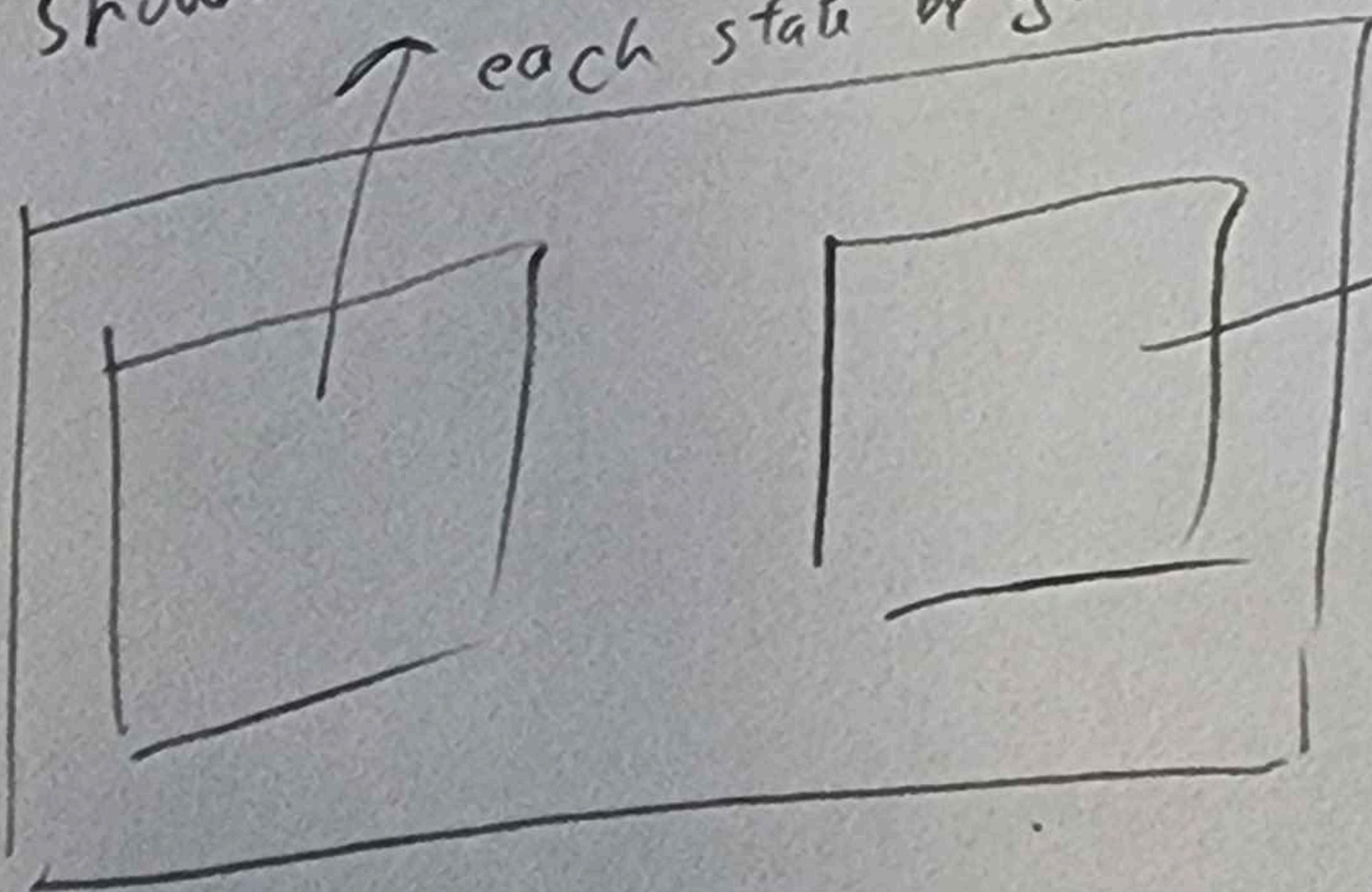


Filter for
State

Year

Focus

Shows diverging bar graph for
each state by gender



Shows
diff
Gender
trend.

Discuss

advantage,

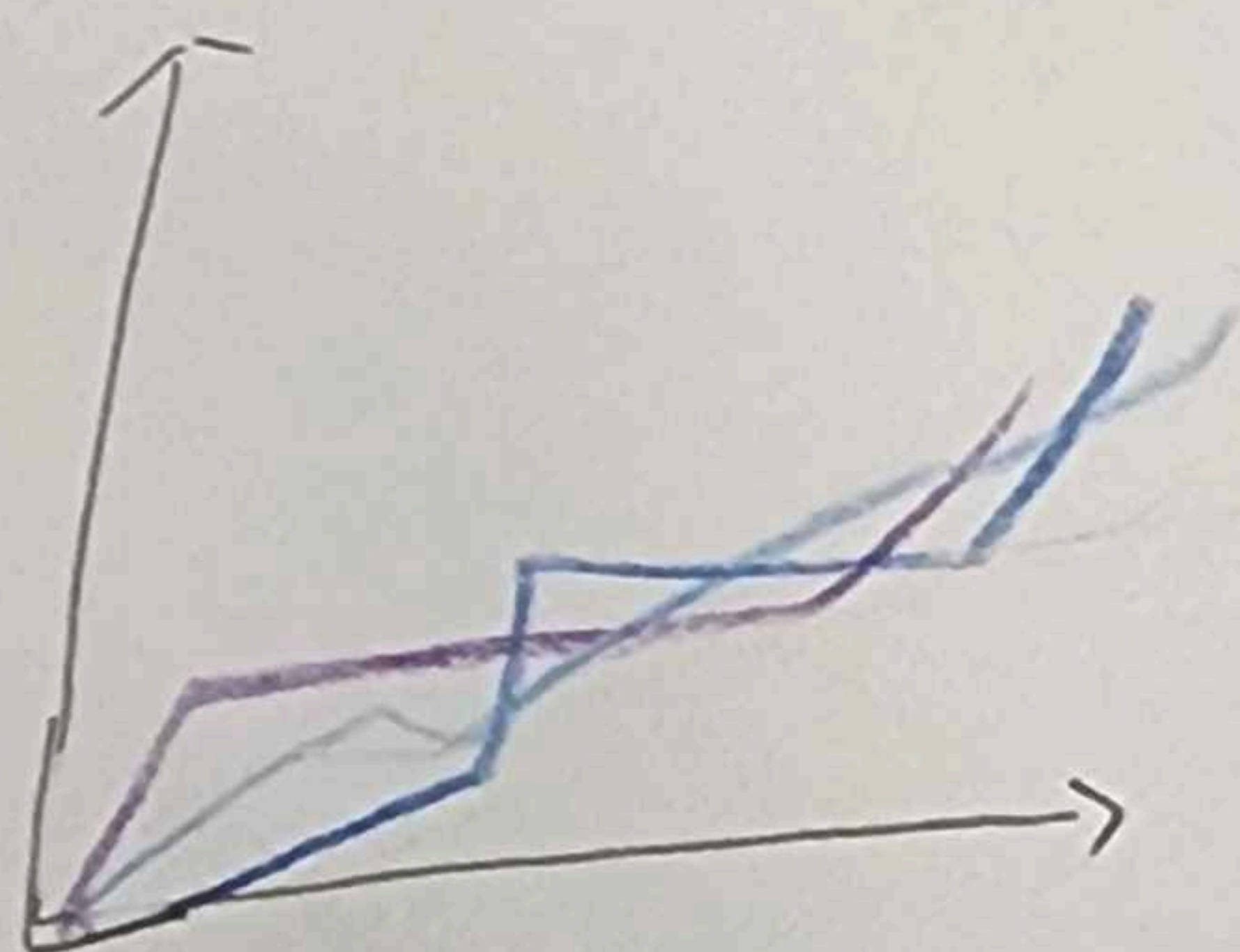
- Excellent for gender comparison
- Visual contrast highlight

disadvantage,

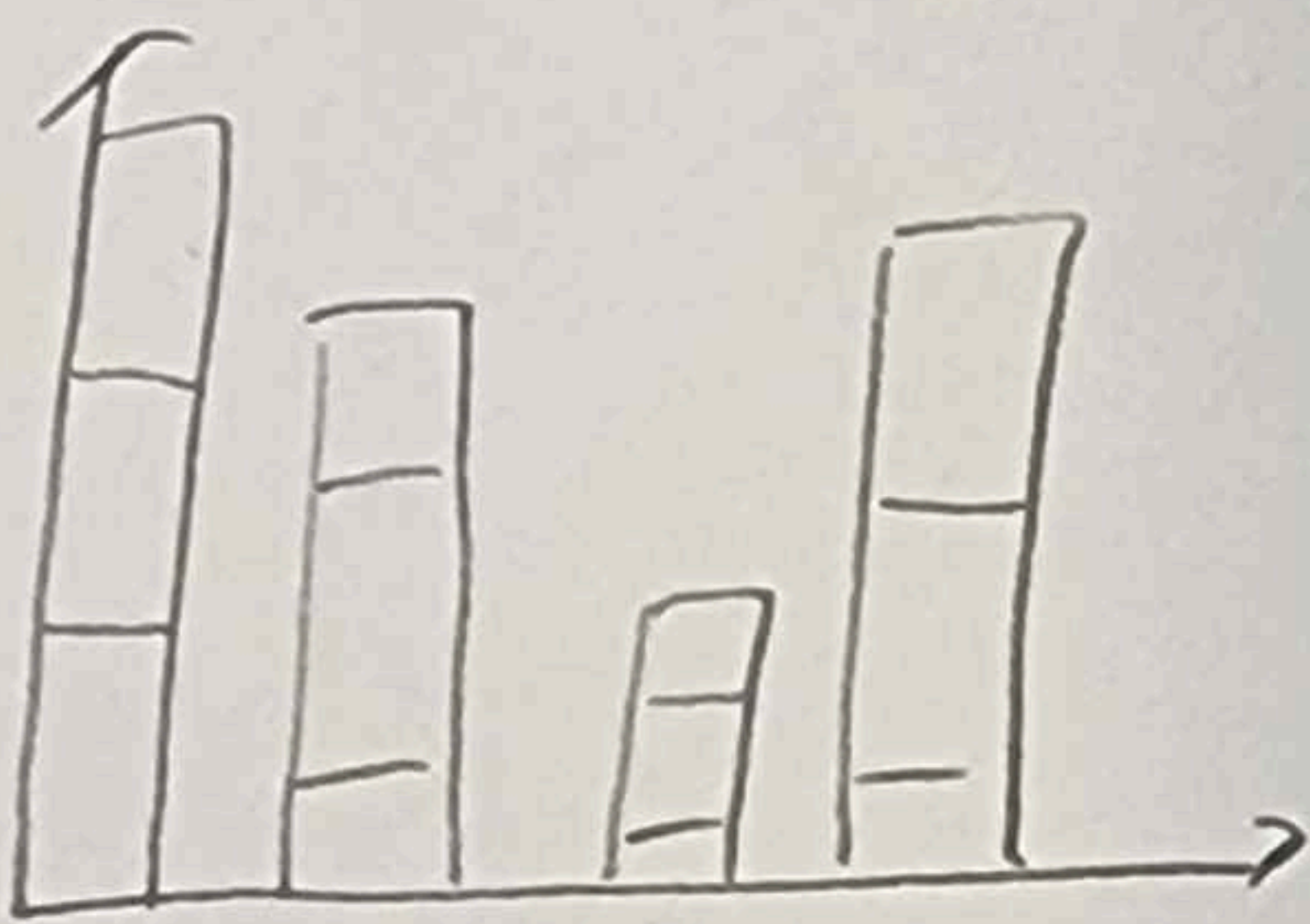
-over loaded with state.

La Youe

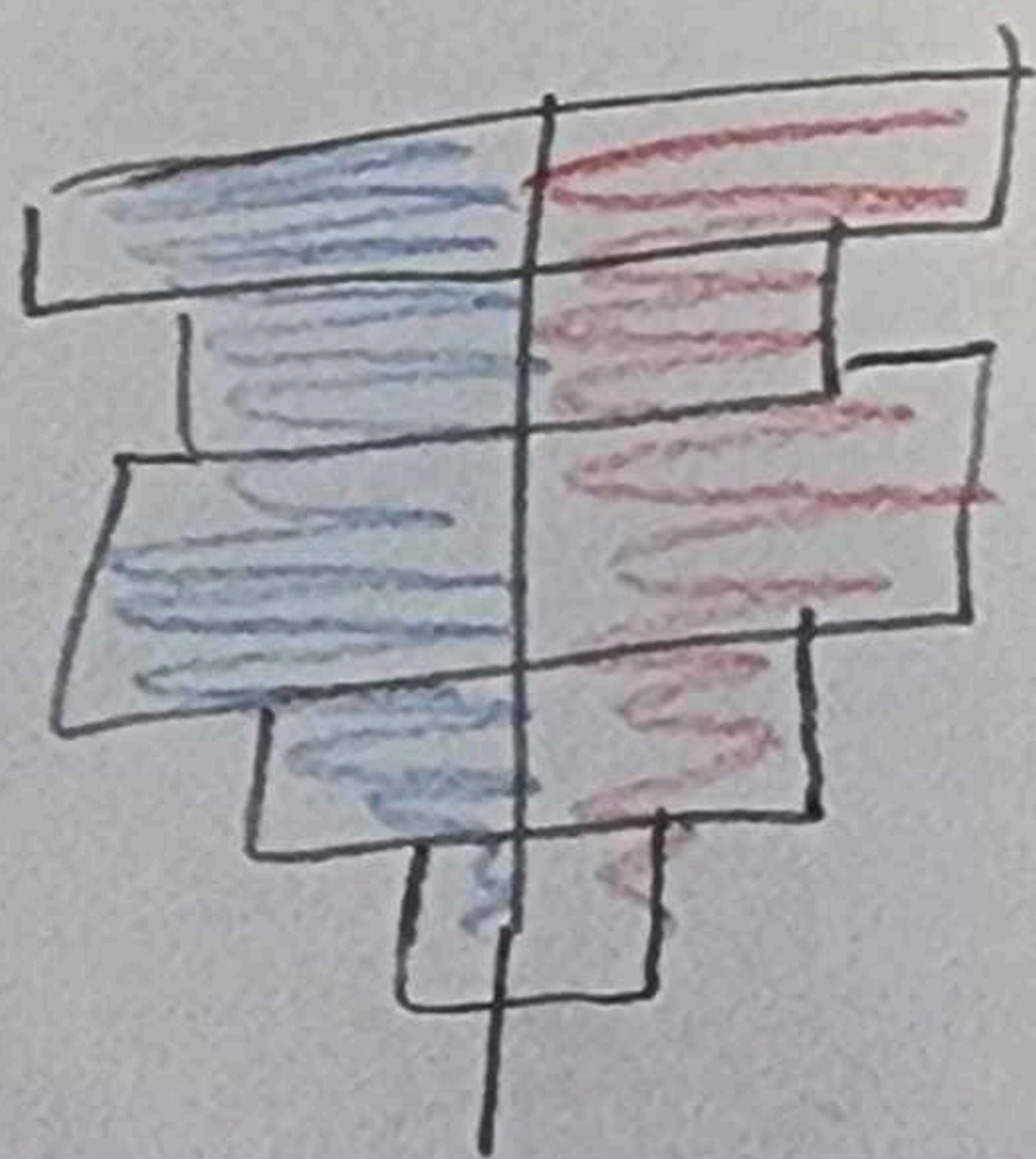
Birth patterns and
gender disparities across
Malaysia states



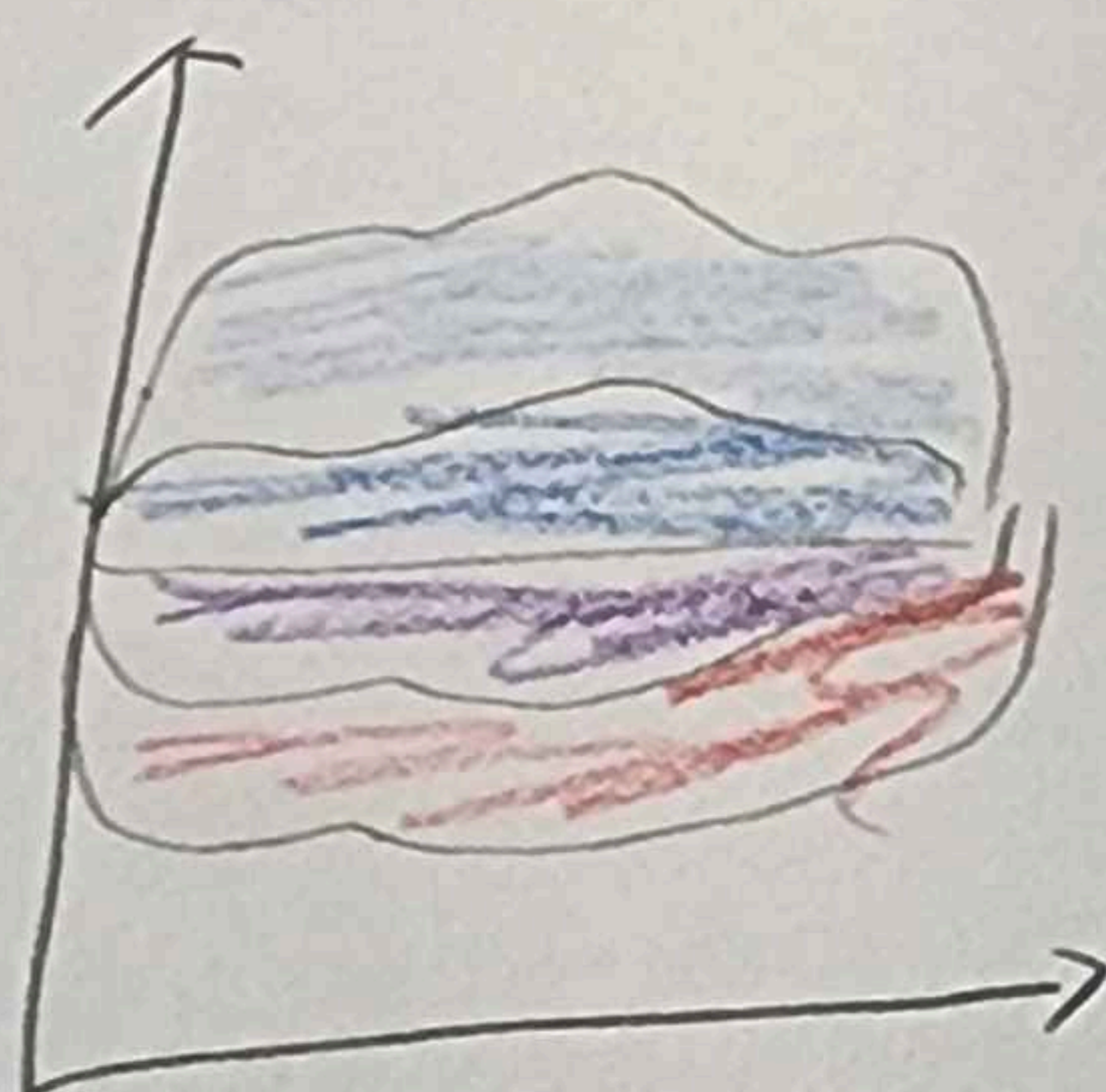
(Trend over time)



(total birth rate each year)



(gender difference)



(Cumulative total)

Title: Final design sheet

Author: Chua Xian Loong

Date: 02/10/2024

Sheet: 5

Task: Final implementation

Operations:

Slider

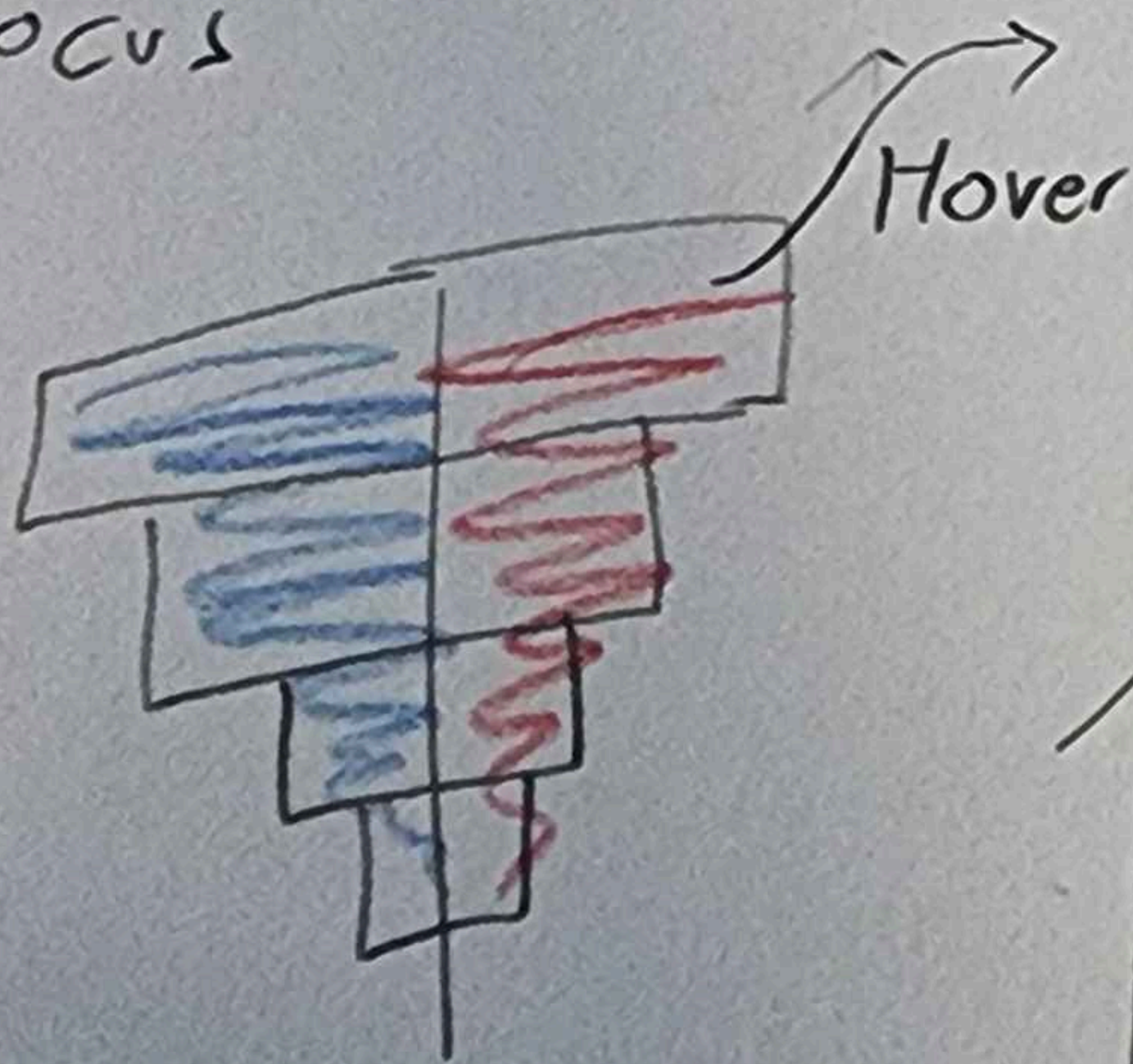
Clickable. (Change years)

☒ states
☐ state,
☐ state,

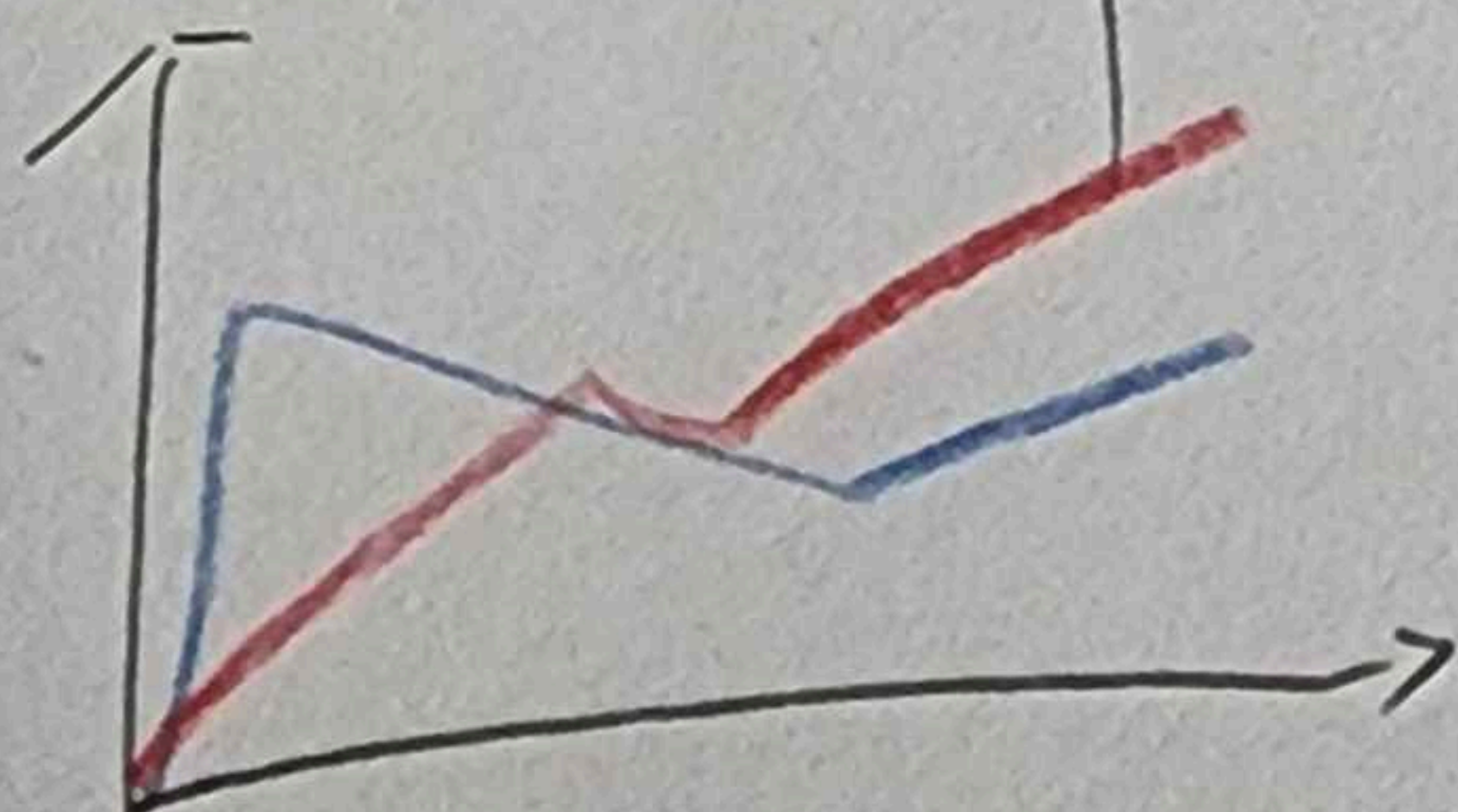
Gender

(Change gender)

Focus



State:
Sex:
Year:
Number of births



Legend
☒ state

Focused

Detail:

* Dataset in CSV
* process spatial data
into geographical
maps