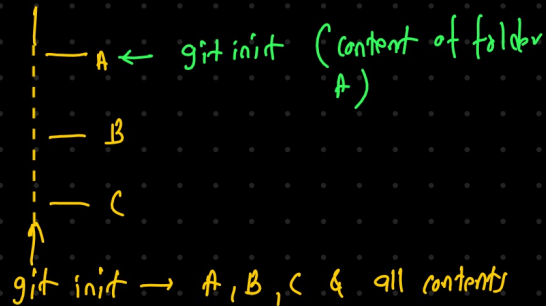


15-06-2025

Agenda:

- crnt - II
- Data visualization

→ git init : initialize a new git repository.



→ git add "file.name"
or
'.' → all

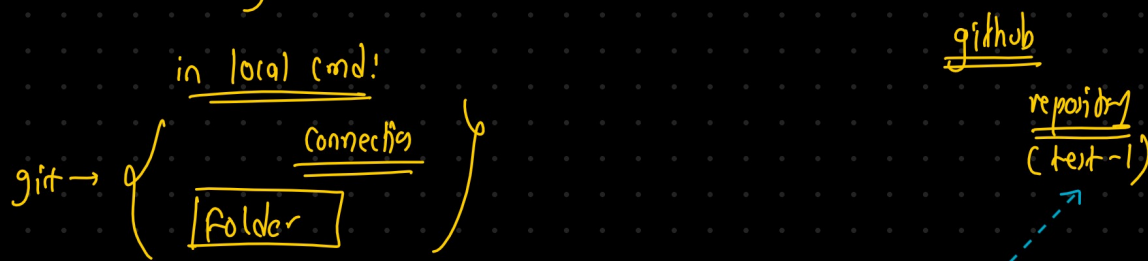
→ add files in staging, makes them ready for the next commit.

4-apples → bought
↙ -re
3-apples

→ git commit -m "bought apple" → record the staged changes as a new commit.
"bought everything"

→ git config --global user.email user.name } configure git (only 1 time)

when creating repository for the first time:—



→ git remote add origin "https link of remote github repo url"

→ git push -u origin main → branch ← master
-set-upstream

→ git clone url

→ bring files from remote repo to local system

git clone "url"



- .git
- files
- url of remote repo
- changed files.

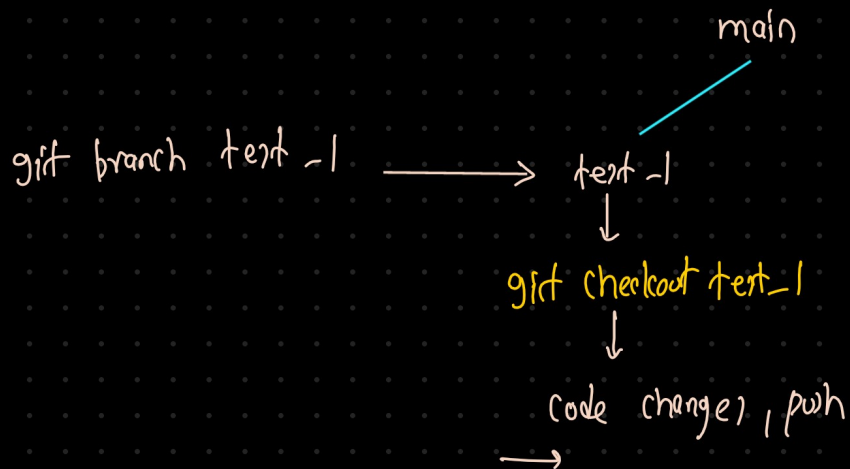
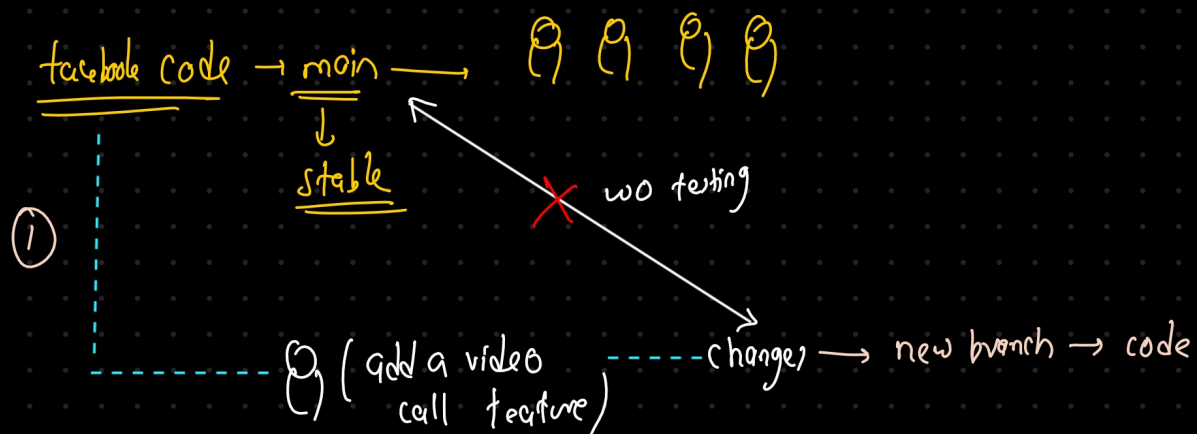
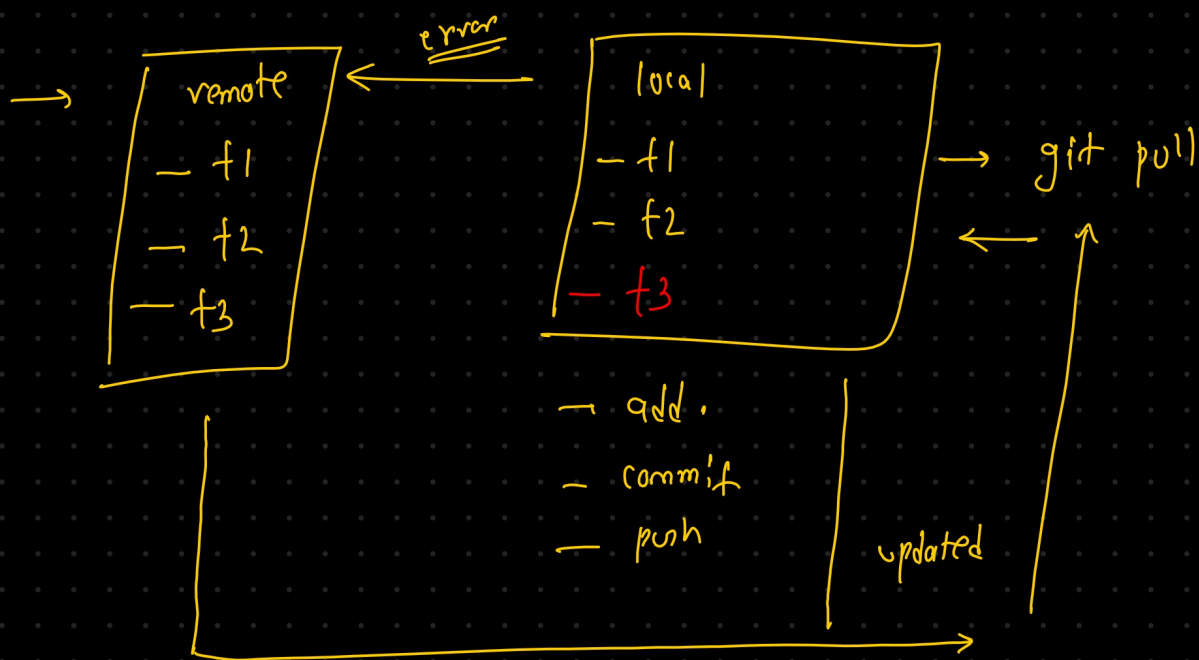
~~git init~~

git add .

git commit -m "change"

~~git remote~~

git push -u origin main / git push

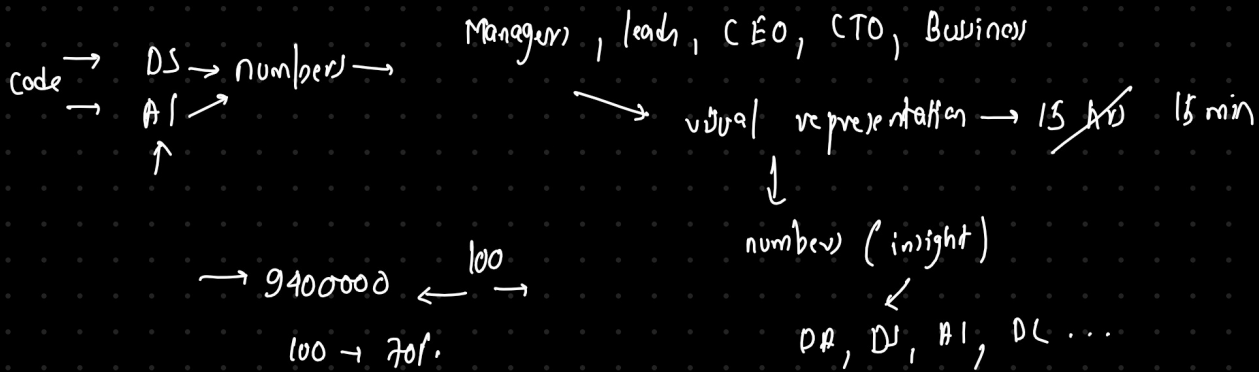


Data visualization

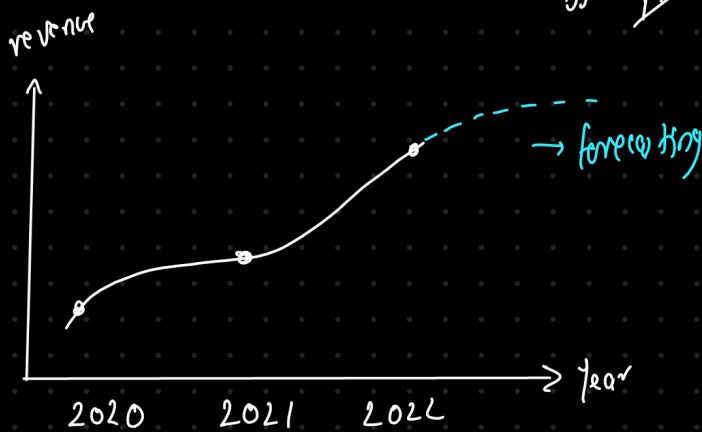
graphical representation of information and data,

- easier to see patterns
- trends
- outliers
- insights

99% 1% ←



fact →



DI → ~~predict~~ → Business → X
fact
↓
No.
↓
mit
↓
vau

DA → power BI → No → Tools → Dashboards → Data analysis →
→ Tableau

DS → python → Tools → Jupyter →
AI → lib

→ Good color (usually pleasing)

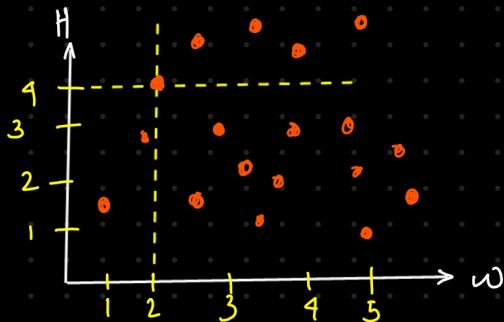


→ Minimalism



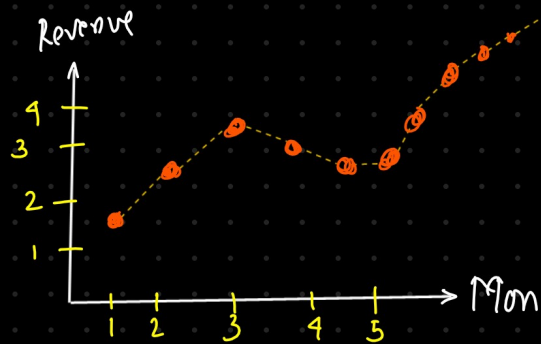
→ Clear → easy to interpret Bar, Pie →

Scatter plot:



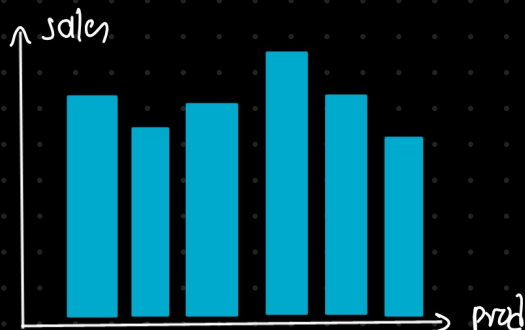
p.A	w	H
0 N1	$x_1 = 2$	$y_1 = 4$
1 N2	x_2	y_2
2 N3	x_3	y_3

line - chart



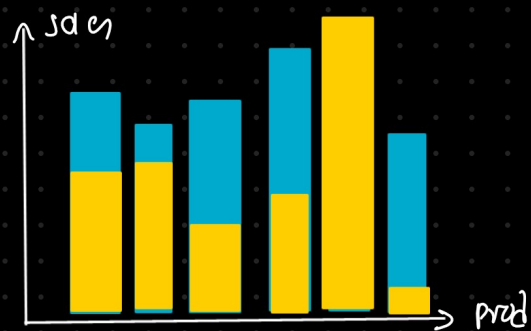
Mon	Insurance-revenue
Jan	120000 \$
Feb	140000 \$
Mar	180000 \$

Bar plots



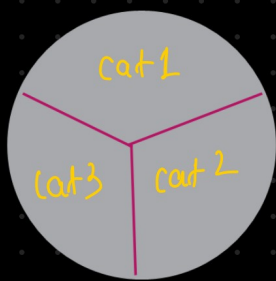
prod	sales
A	\$
B	\$
C	\$

stacked Bar plot

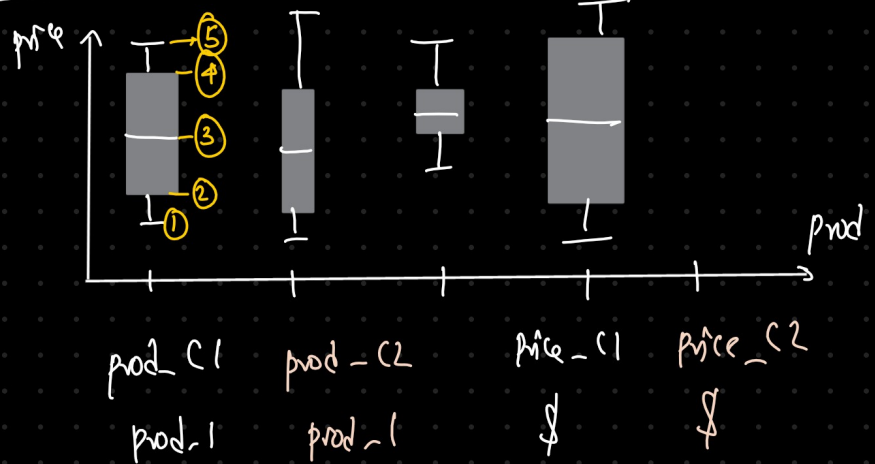


prod-food	sales	prod-elect	sales
A1	\$	A2	\$
B1	\$	B2	\$
C1	\$	C2	\$

pie chart



Box plot / whisker plot



- mean
- outlier
- 75%, 50%, 25%
- distribution

group by

Name	Country	Salary
A	IND	1000
B	US	2000
C	CA	2000
D	IND	3000
E	US	1000
F	CA	4000

group('country')

A	IND	1000
D	IND	3000
B	US	2000
E	US	1000
C	CA	2000
F	CA	4000

Invoice	month	Revenue
1	2009-12	26
2	2010-01	22
3	2009-12	100
4	2010-01	2
5	2010-03	100
6	2010-04	200

get revenue for month

2009-12 → revenue → sum()

get revenue by month

→ groupby('month')

→ 2009-12 → 26
2010-01 → 22
2010-03 → 100
2010-04 → 200

2009-12	sum
2010-01	sum
2010-03	sum
2010-04	sum

plot

pointing →



→ (canvas)

→ size

Text = "person"

x, y

↓

1

↓

1 + 2

