DICTIONARY

word : meaning

search bahut efficient hoti hai

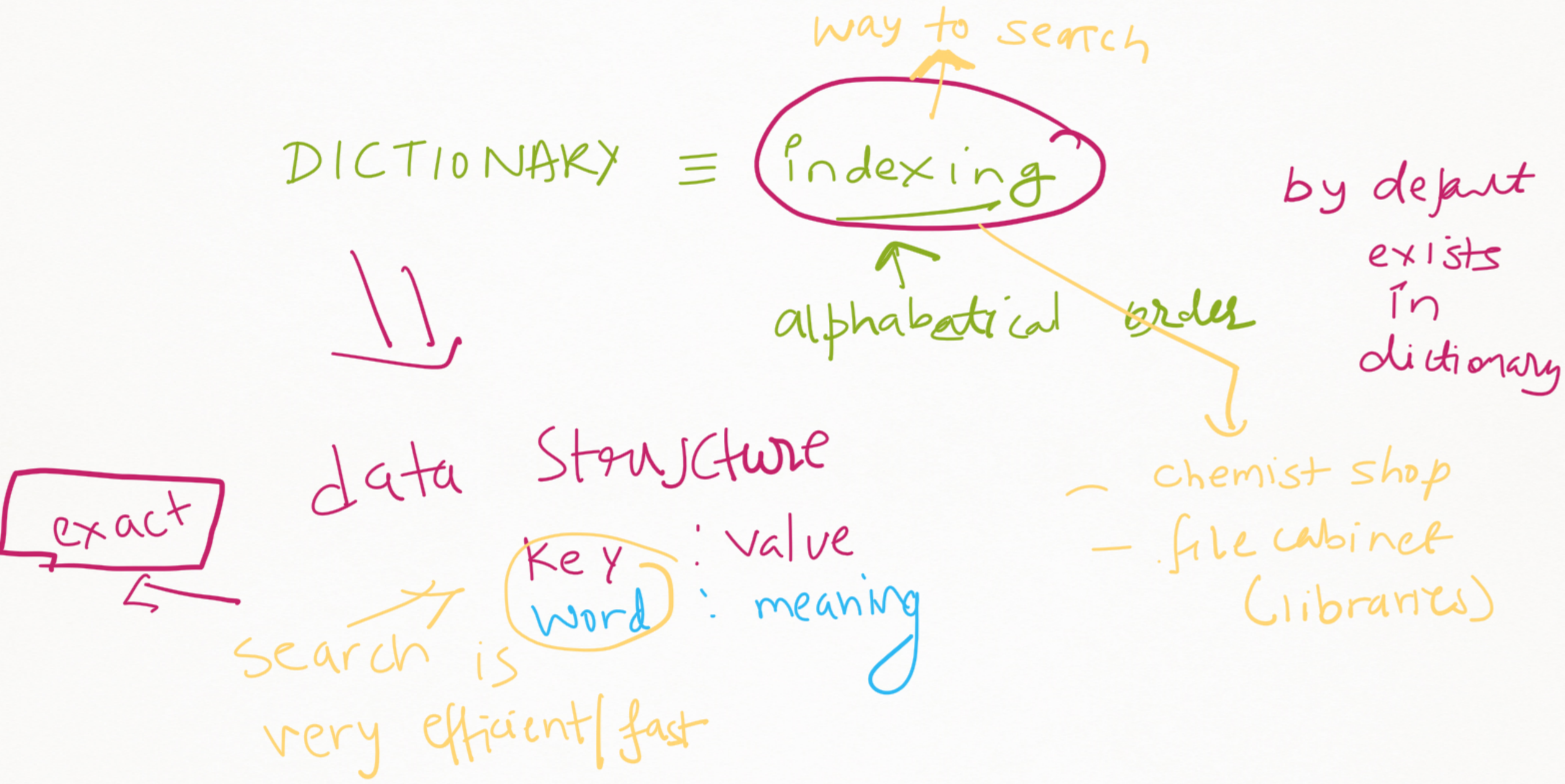
indexing

index

chapter 1 32

chapter 2 71

chapter 3 81


way to search
DICTIONARY ≡ indexing
alphabetical order
by default exists in dictionary
data structure
exact
key word : value : meaning
search is very efficient/fast
- chemist shop
- file cabinet (libraries)

implement list using dictionary

dictionary / List

for this list is more efficient

you can implement list using dictionary

→ append
pop
⋮

implement dict using list

a) [["key1", "value1"], ["key2", "value2"] .....]

b) [["key1", "key2" .....],
["value1", "value2" .....]]

implement [key lookup] using list

↓

value return karo

storing information in a dictionary

a)

b)

name	eng	scie	maths
abc	37	39	43
def	56	38	46
xyz	49	52	70

a) there are many ways to store the same information

b) which way is more efficient?

↳ depending on the questions we are going to ask on that data

name	city
n1	c1
n2	c2
n3	c3
n4	c3
n5	c3

Q1) → for any name
find me city

Q2) → for any city
find me names

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for these questions
think of proper
data structures

name	subject #	maths S1	en S2	hi S3
abhi	n1	30	40	50
anno	n2	50	40	20
ravi	n3	20	30	40

Q for n1 and s1 give me marks

Q all marks for same name

Q max marks of "name" in any subject

Q who got highest in maths

```
ds = { "name" : ["abhi", "annu", "ravi"],
"cities" : ["delhi", "mumbai", "hyde"] }
```

data_structure

Q. find city for "abhi"

```
names = ds["name"] ; i=0
while(i< len(names)):
    if names[i] == "abhi":
        break
print ds["cities"][i]
```

how to "efficiently" store data

Library

Scenario 1

alphabetically on

"book titles"

easier to search

"godaan"

<book title.

Scenario 2

alphabatically on

"authors"

easier to search

"munshi premchand"

<author