Week-5 [Connect]

Special class

Contact link

2-3 day

15 min

Consistency

wk

sk

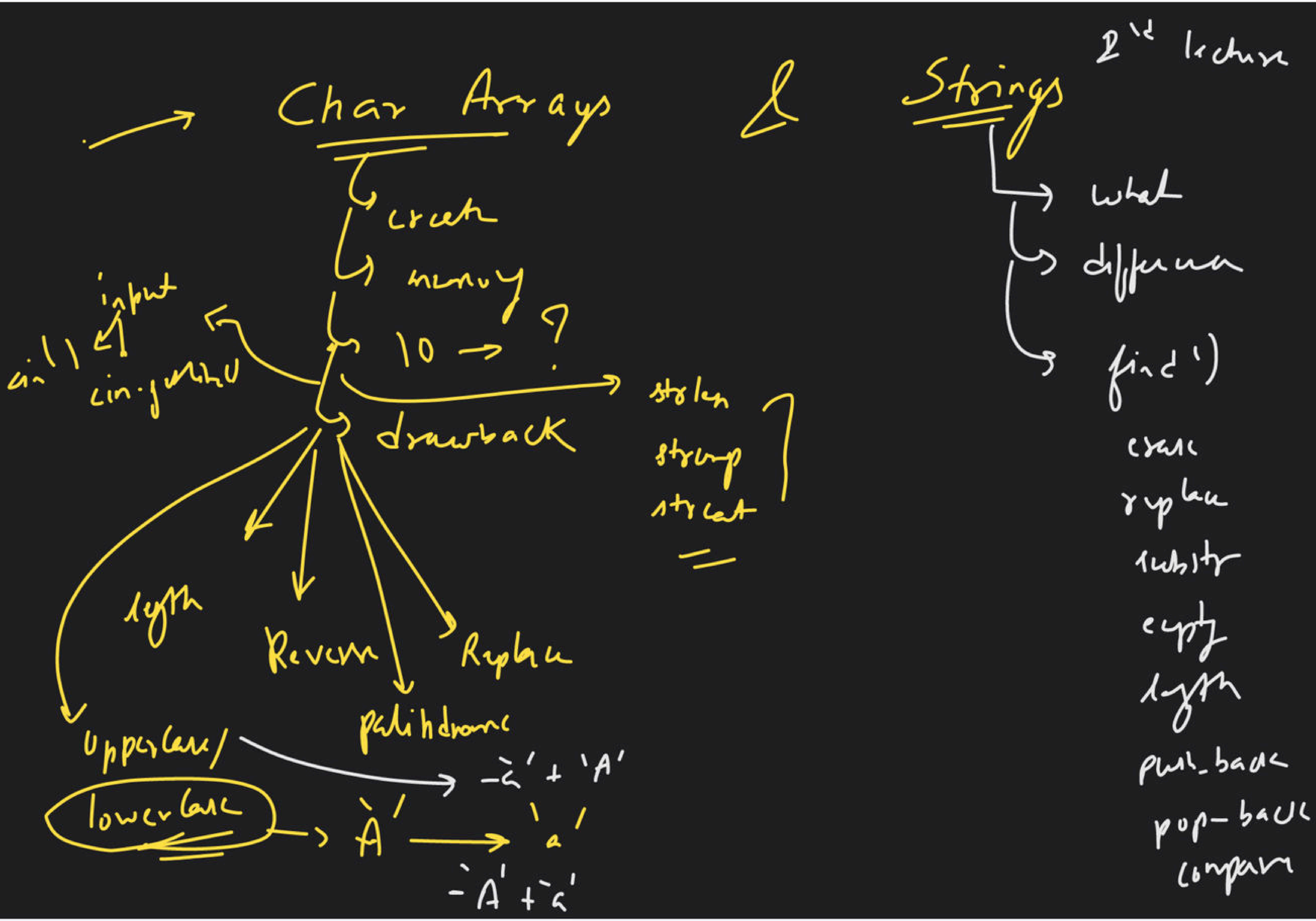
sk

Q-

ac

Love Babbar • Mar 1, 2023

27th feb



2nd lecture

Char Arrays & Strings

- create
- memory
- 10 → ?
- input
  - cin
  - cin.getline()
- strlen
- strcmp
- strcat
- drawback
- length
- Reverse
- palindrome
- Replace
- uppercase/
- lowercase
- -'a' + 'A'
- 'A' → 'a'
- -'A' + 'a'

Strings

- what
- difference
- find()
- erase
- replace
- substr
- empty
- length
- push_back
- pop-back
- compare

2nd

- → Valid Palindrome
- → Remove all adjacent duplicate
- → Remove all occurrence of substring
- → min. time difference
- → Count Palindromic Substring
  - EASY
  - Brute force → O(n^3)

Largest Number

→ sort(— , — , —)

custom cmp

Bhot

BHOOOT

Bear

0 code

2-pointers

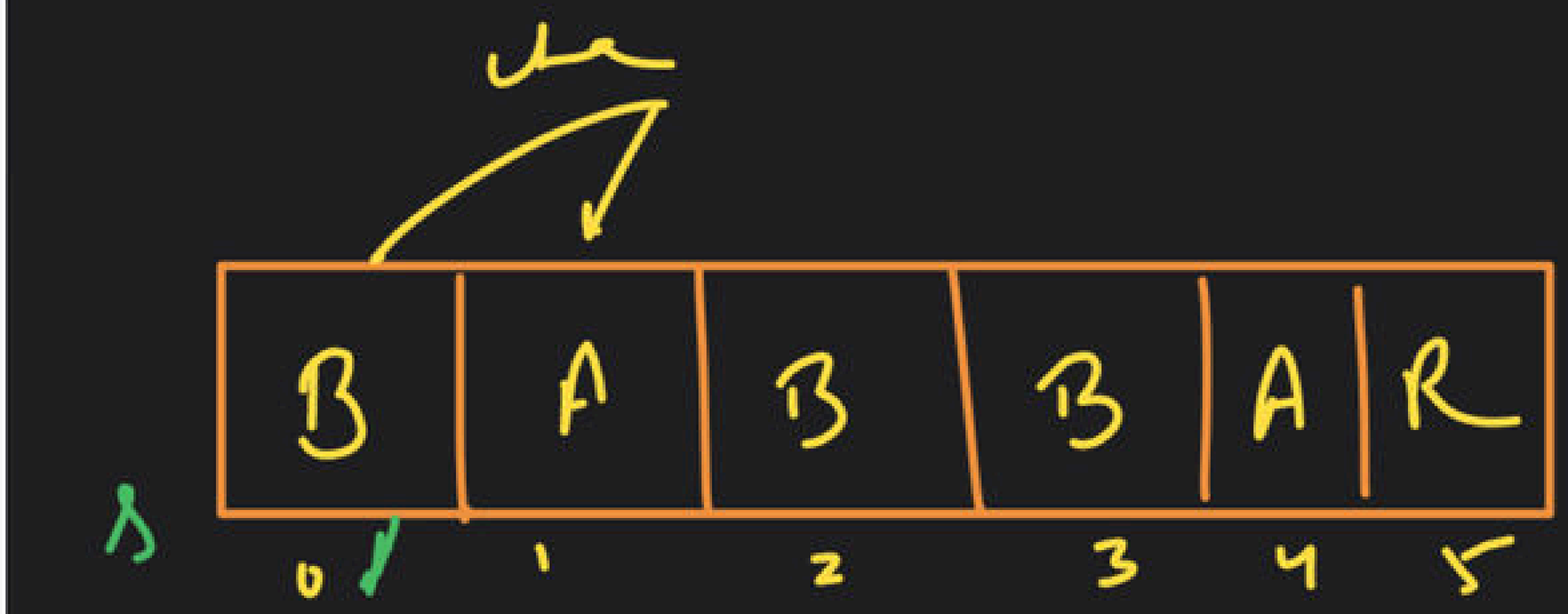
- odd substr O(n^2)
- even substr

→ Sort function → custom comparator

string s = "babbar"

↓

sort



→ sort(s.begin(), s.end())

↓ asc order

A A B B B R

ans

4 1, 2, 3 5

→ custom comparator

T
r

```
bool cmp (char x, char y)
{
    return x < y;
              x > y
              dsc order
}
```

Help Ramu

```
bool cmp (int a, int b)
    {
        return a > b;
    }
```

a < b

~~b>~~

a > b

"love"	"babbar"	"rahul"	"sandeep"	"goa"

#1 → first letter compare → lexicographical

#2 → character sum

love → 12 + 15 + 22 + 5 = 54

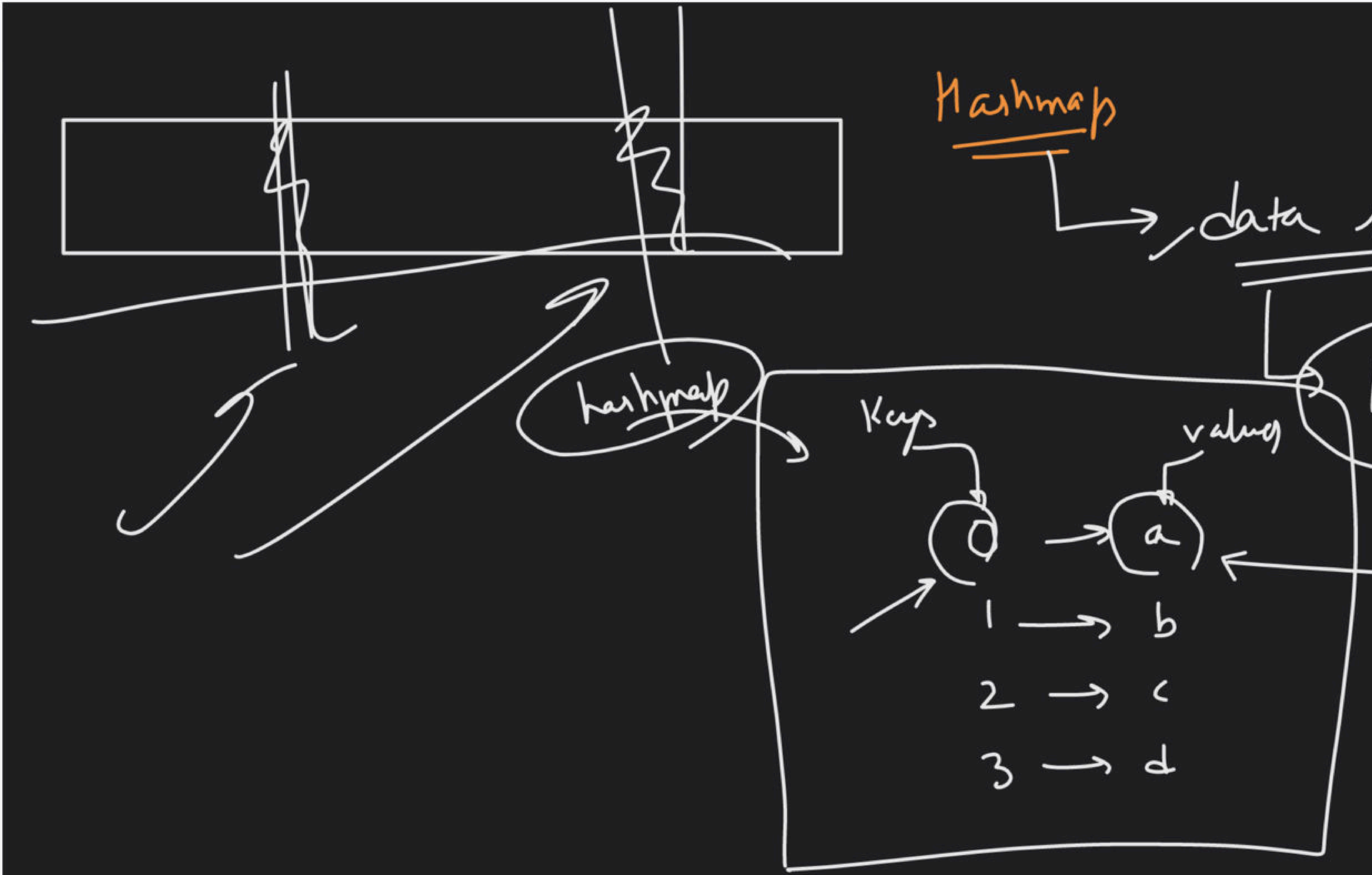
babbar → $\underbrace{2+1}\ \underbrace{+2}\ \underbrace{+2}\ \underbrace{+1}\ \underbrace{+\cancel{2}18}$ → 26

babber → love

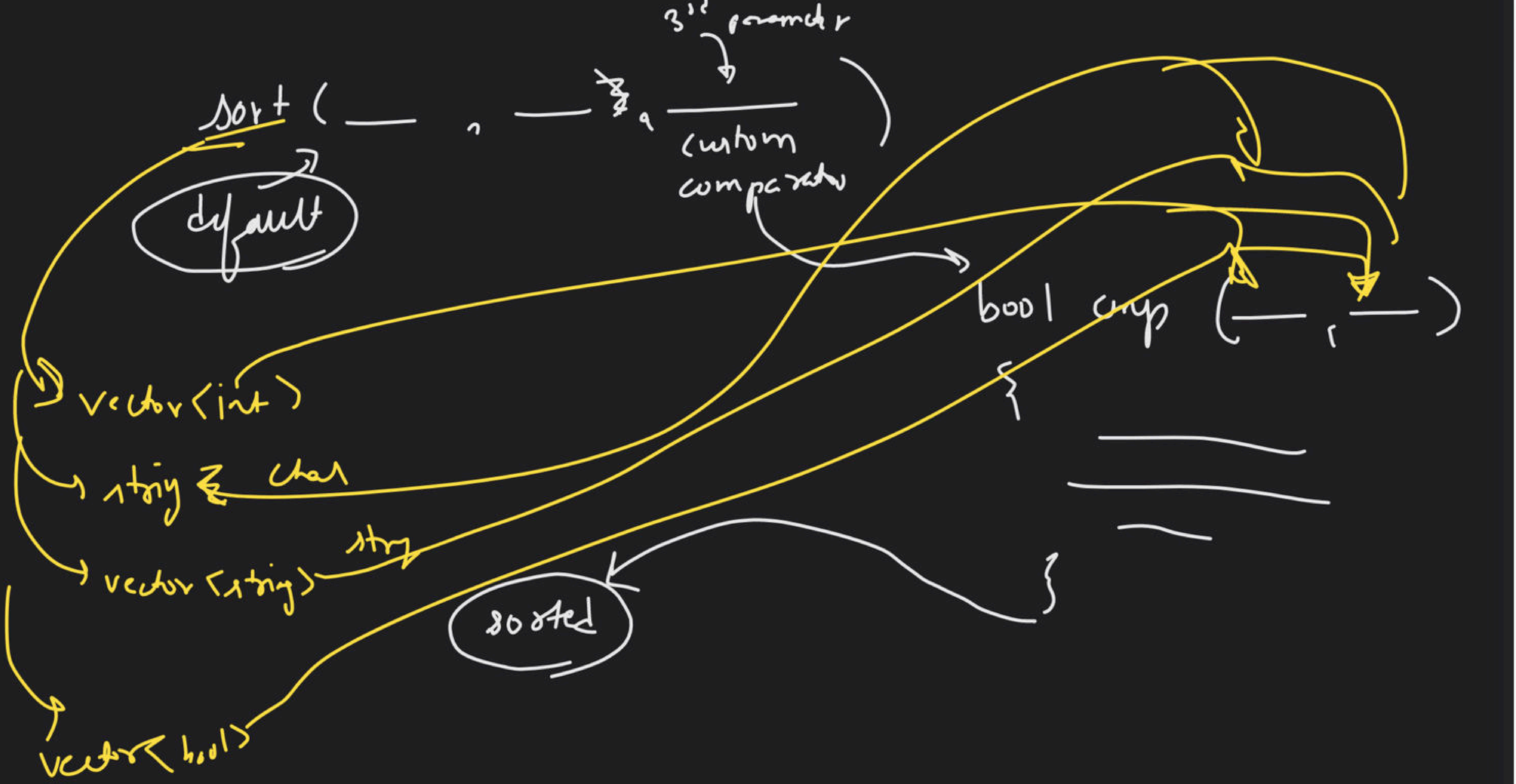
Hashmap

→ data structure

Key-value pair



Create
insert
access



3rd parameter
sort (___ , ___ , ___)
custom comparator
default
bool cmp (___ , ___)
{
}
sorted
vector<int>
string
char
vector<string>
string
vector<bool>

Backlog

< > O(1)

string
O(N)
I/O
sum
O(N)
in

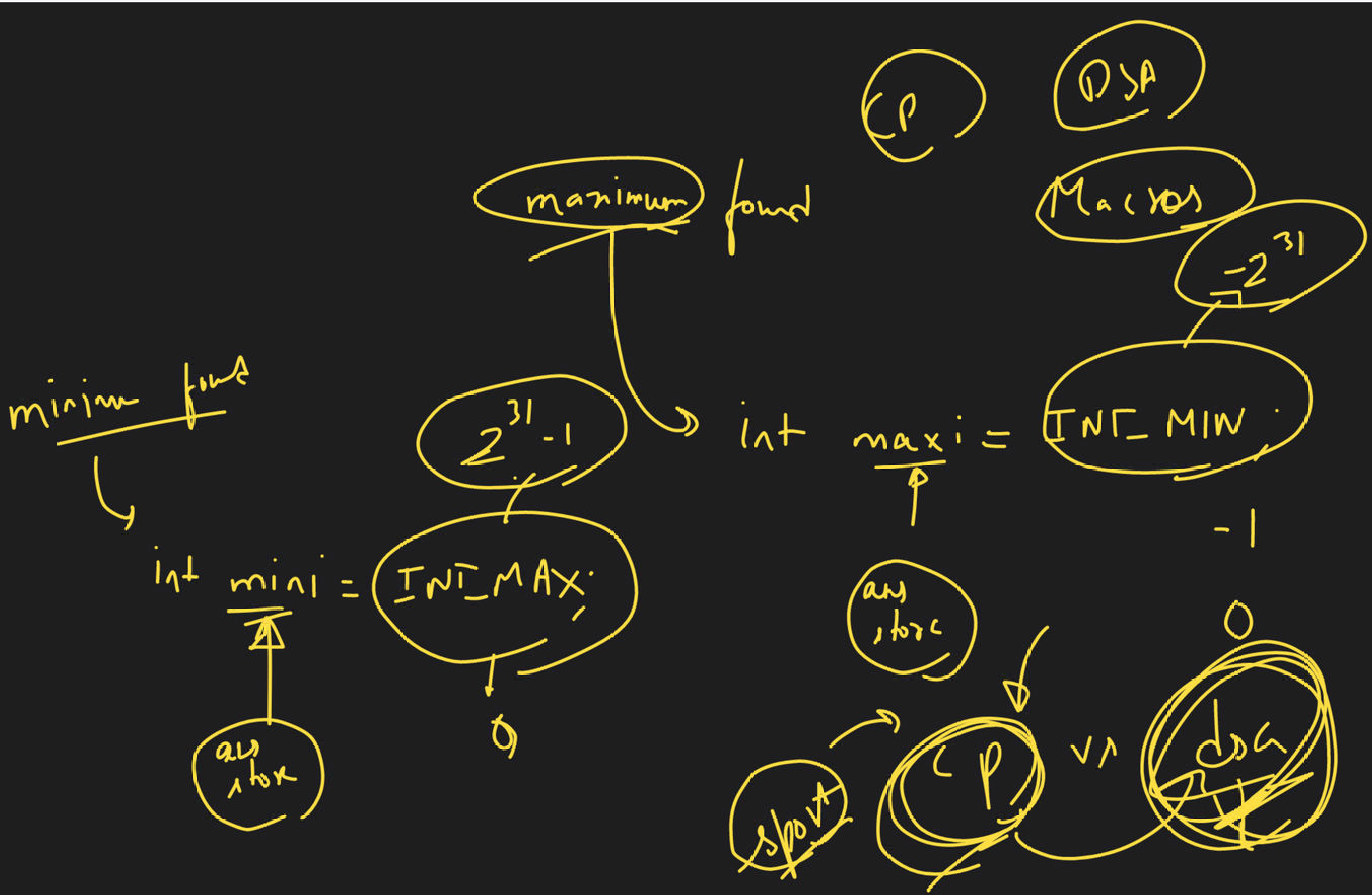
```
for (auto val : arr)
{
    cout << val;
}
```

vector<int>

vect <char>

vector<str>

str



CP

DSA

maximum found

Macros

-2^{31}

minimum found

$2^{31}-1$

int mini = INT_MAX;

0

ans, store

int maxi = INT_MIN;

-1

0

ans, store

sport

CP vs dsa