



15 mins  
until  
break  $\Rightarrow$

## Bubble Sort

(write Code)

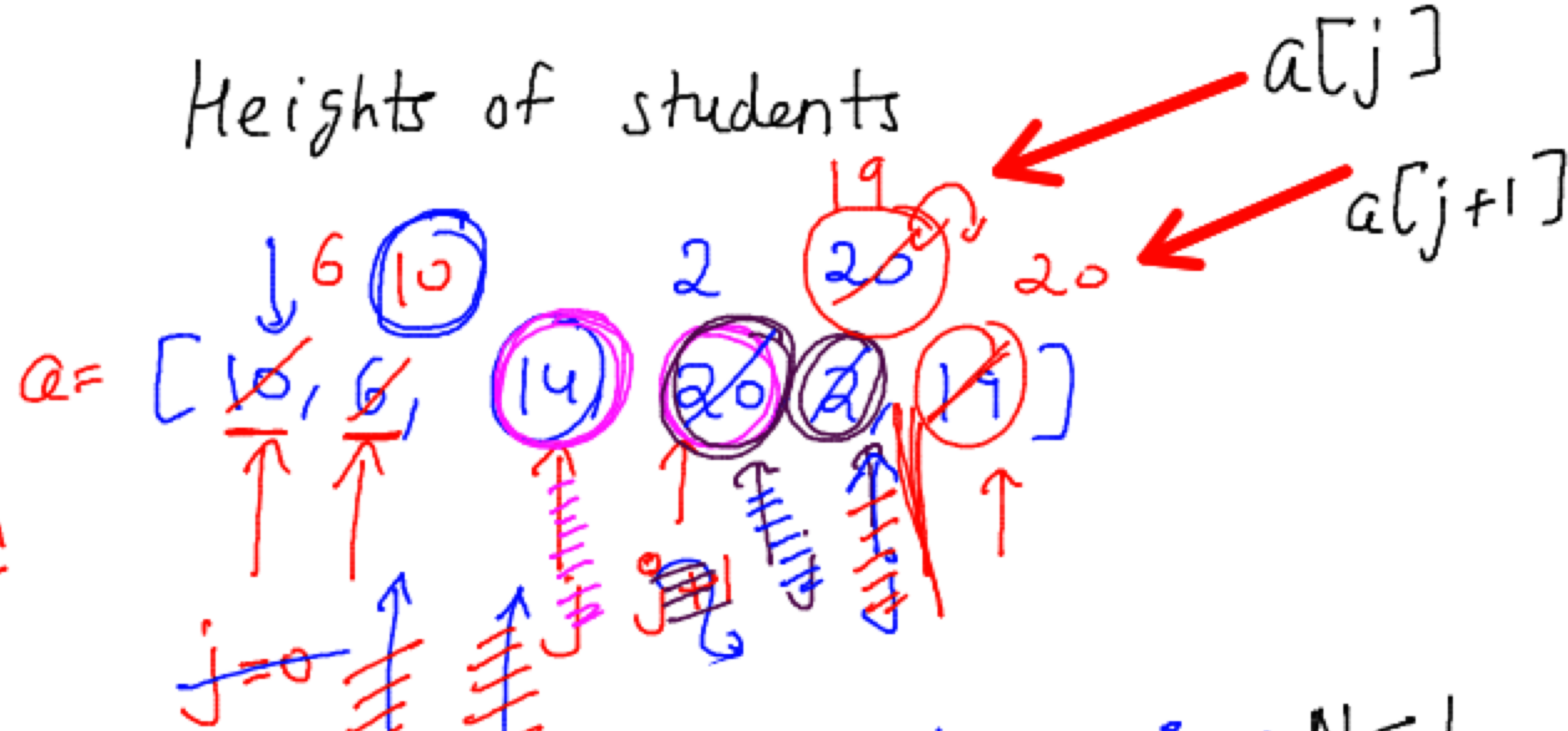
0 - Logic  
Pseudocode.

1 - Plan the  
Code

2 - Write actual  
code

3 - Test

$i = 0$   
1 iteration



$N = 6$

0 1 2 3  $N-3$   $N-2$   $N-1$   
[6, 10, 14, 2, 19, 20]

$j < 5$

while  $j < \underline{N-1}$

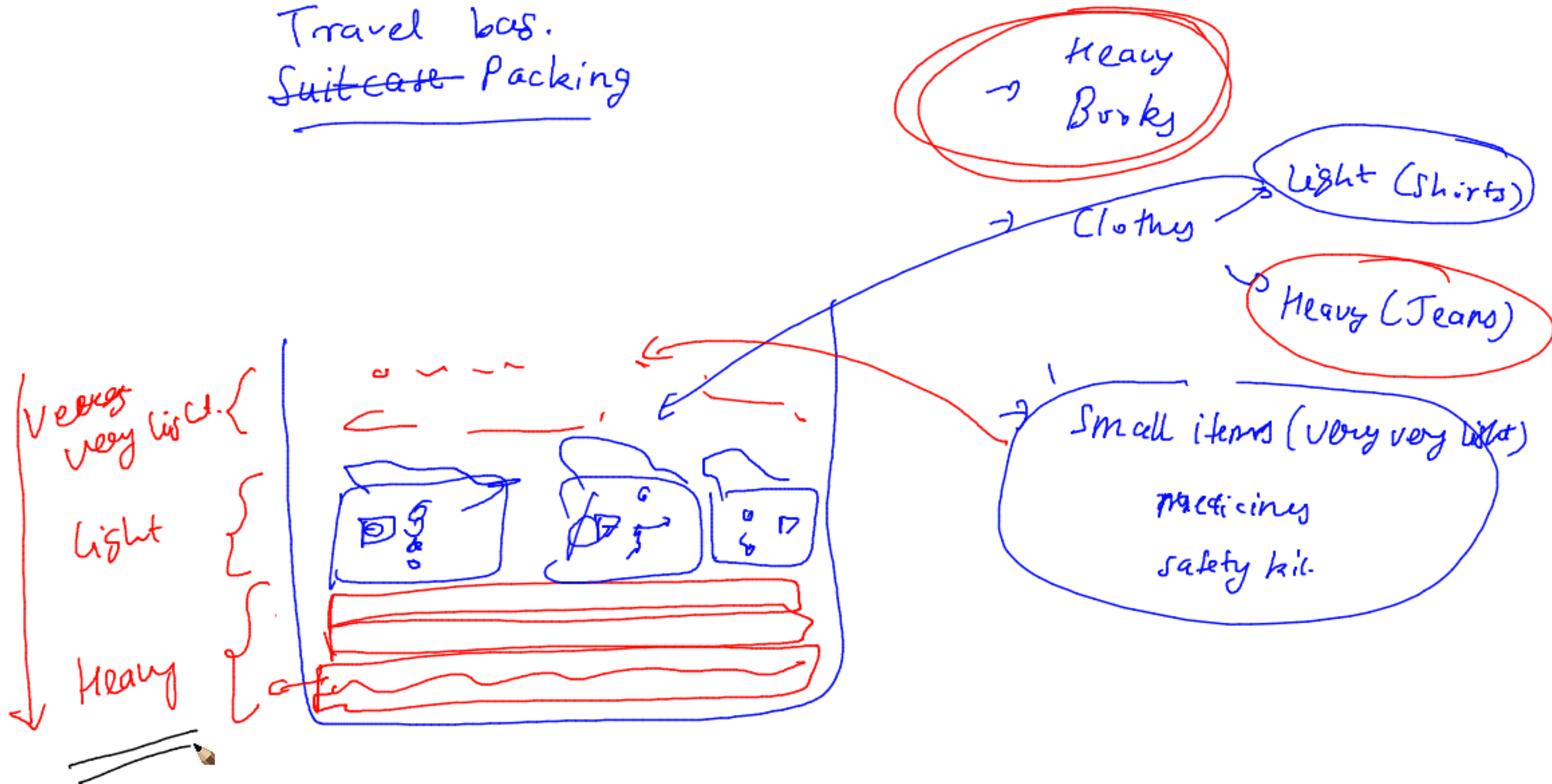
if  $\underline{a[j]} > \underline{a[j+1]}$ :  
     $\text{swap}(a[j], a[j+1])$  ✓  
     $j += 1$

~~10 > 14~~  
 $20 > 19$





## Travel bag. Suitcase Packing







Selecting  
&  
Adding/Placing  
in order  
of  
value.

[1, 5, -1, 2, 10, 3]

Selection Sort

[-1, 1, 2, 3, 5, 10]

a = [1, 5, -1, 2, 10, 3]

arrSorted = [-1, 1, 2, 3, 5, 10]

HW!

Try to implement

- ① With extra space
- ② Without extra space.

→ Find <sup>next</sup> smallest,  
→ append to the  
sorted array





$$\frac{N}{2} = \frac{1}{2} * N$$

$O(N)$

Pseudo code

$i++$   
 $++i$

$\Rightarrow$

Python

$i += 1$

Mid-module will

include

everything

Covered until

Wed, 14th Sept 11pm

# You have left the meeting

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Code\_Annotations.pdf

Uploading