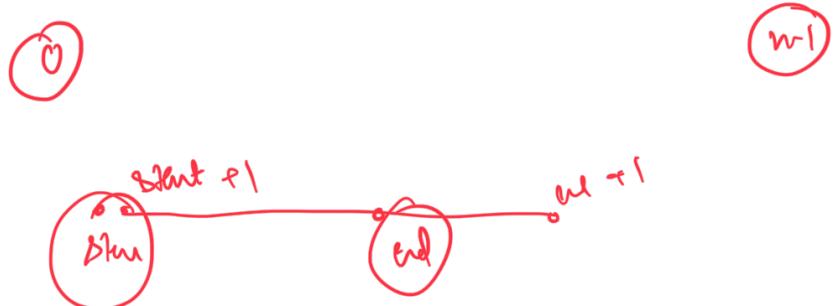
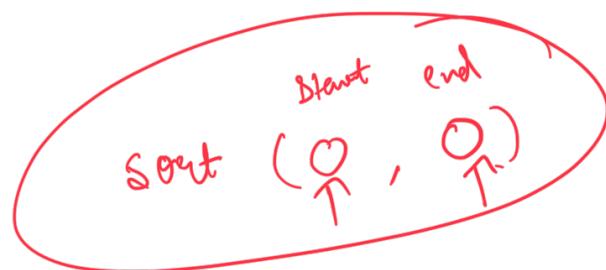


We will start at 8:33



So far what we have discussed, they are general purpose sorting algorithm.



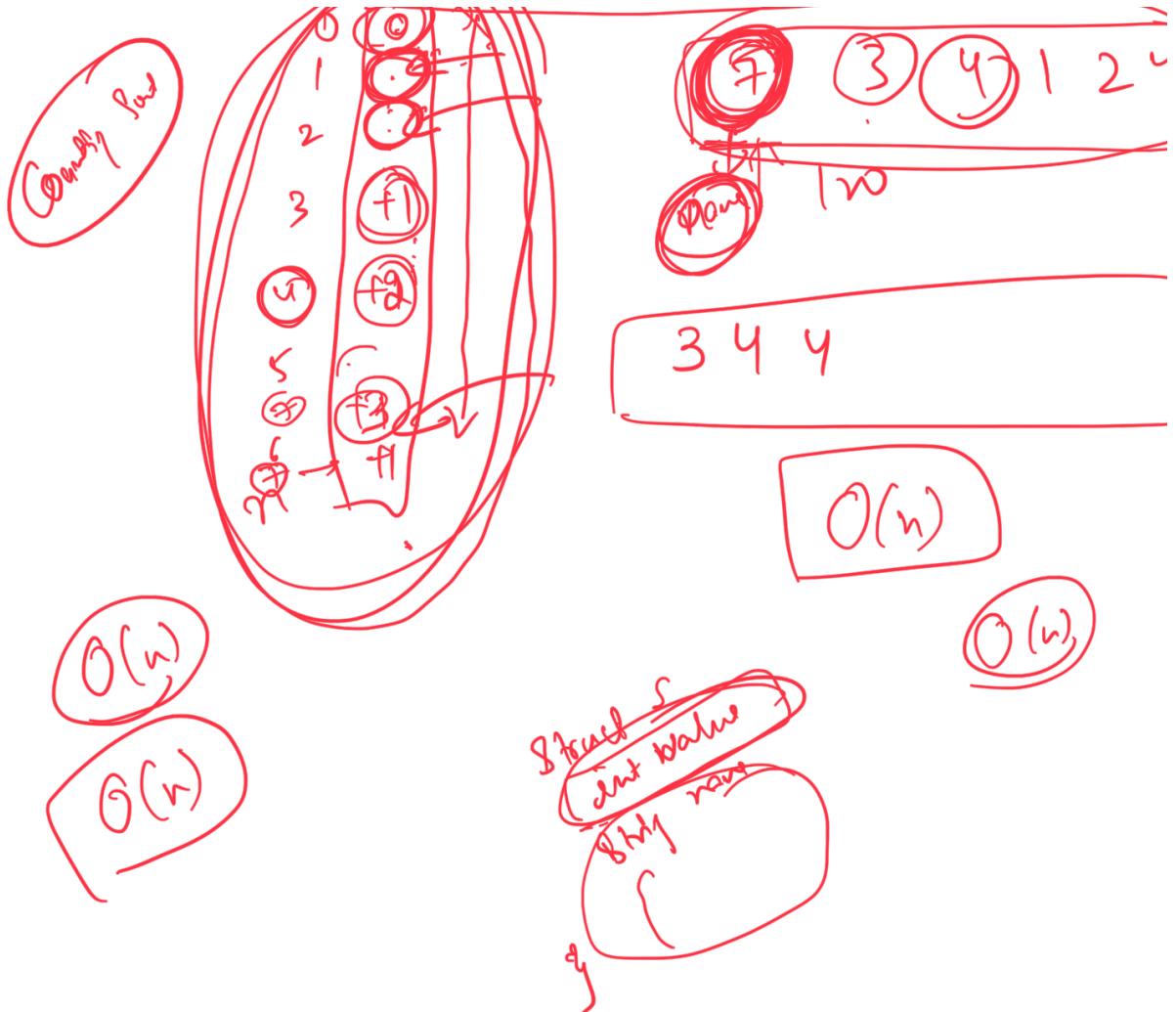
- Counting Sort ↗
 - Bucket Sort ↗
 - Radix Sort ↗
 - Interpreting Questions



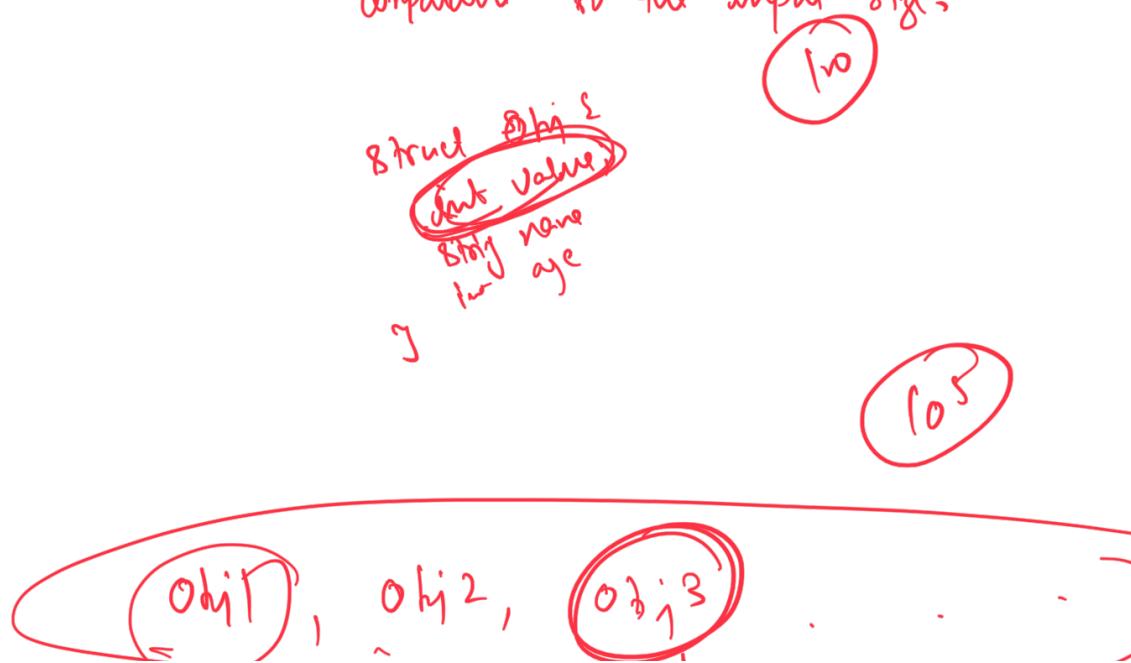
positive

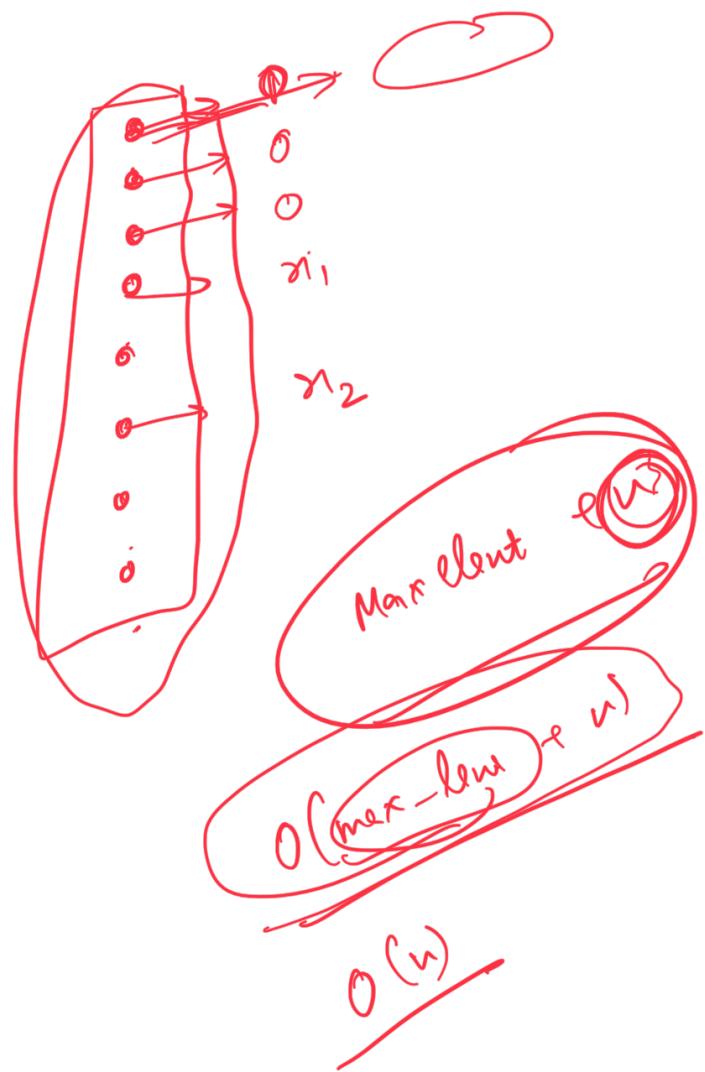
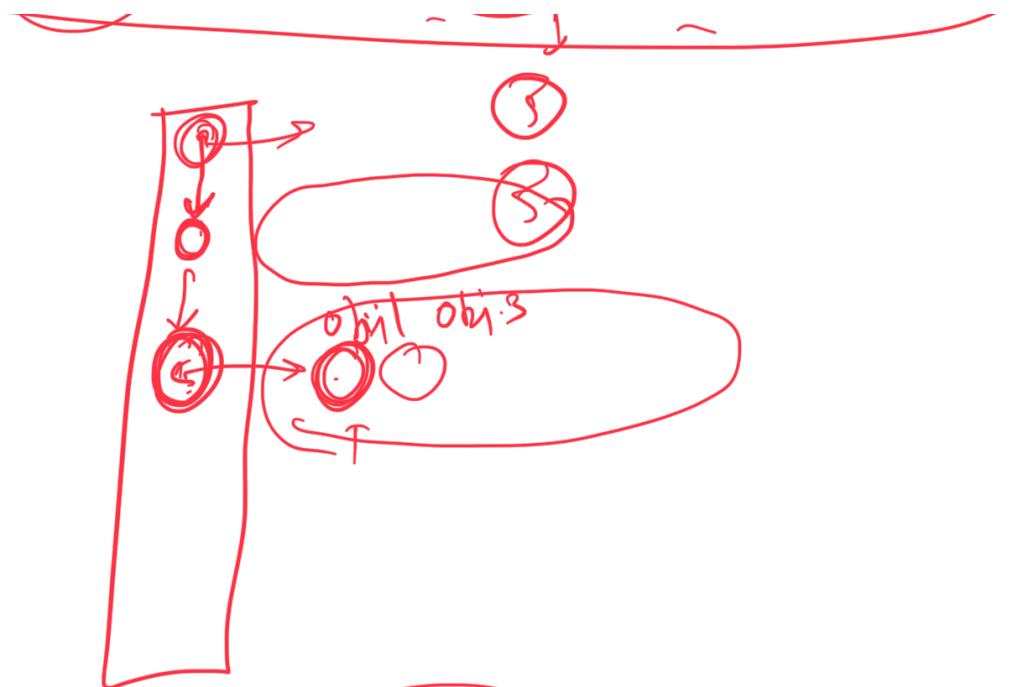
Most of them the input is kind of integers

↳ If the maximum element in the container it is equivalent to n .



- All the input element should be pointing to the list.
- All the input element should be integer.
- The maximum element, it should be comparable to the input size.





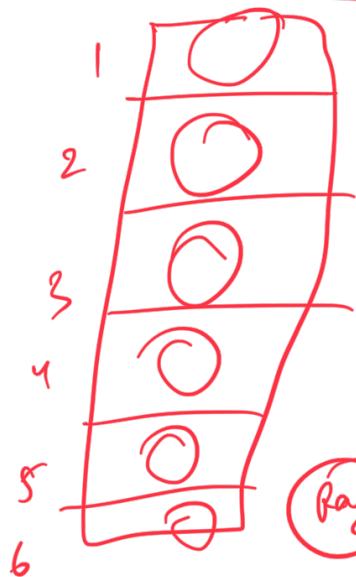
Bucket Sort



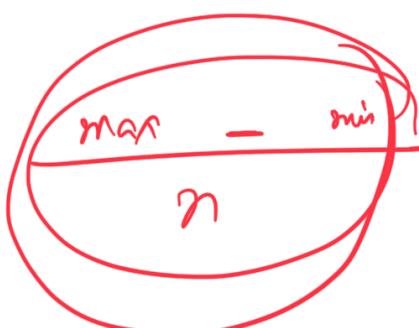
Bucket Sort Algorithm

→ Maximum digit in the array it should be comparable n

2-3 4-7 6-8 3-9 4-

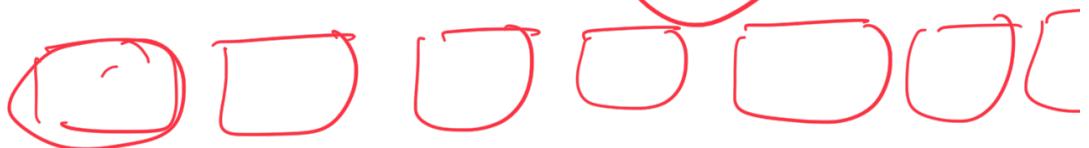


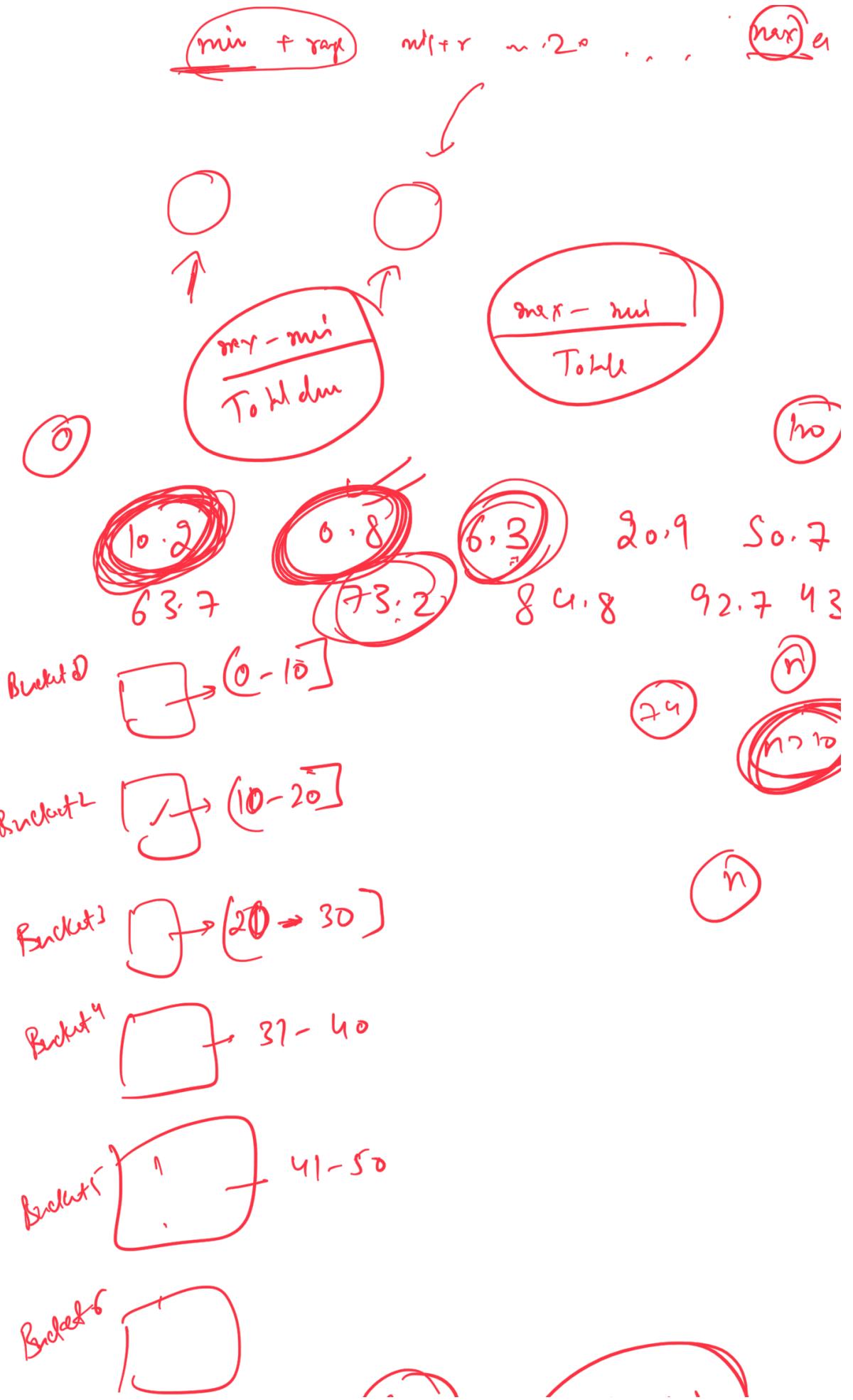
Range

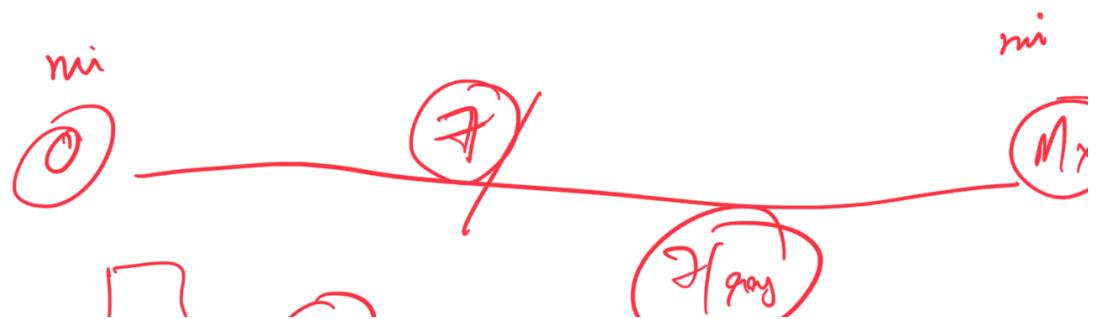
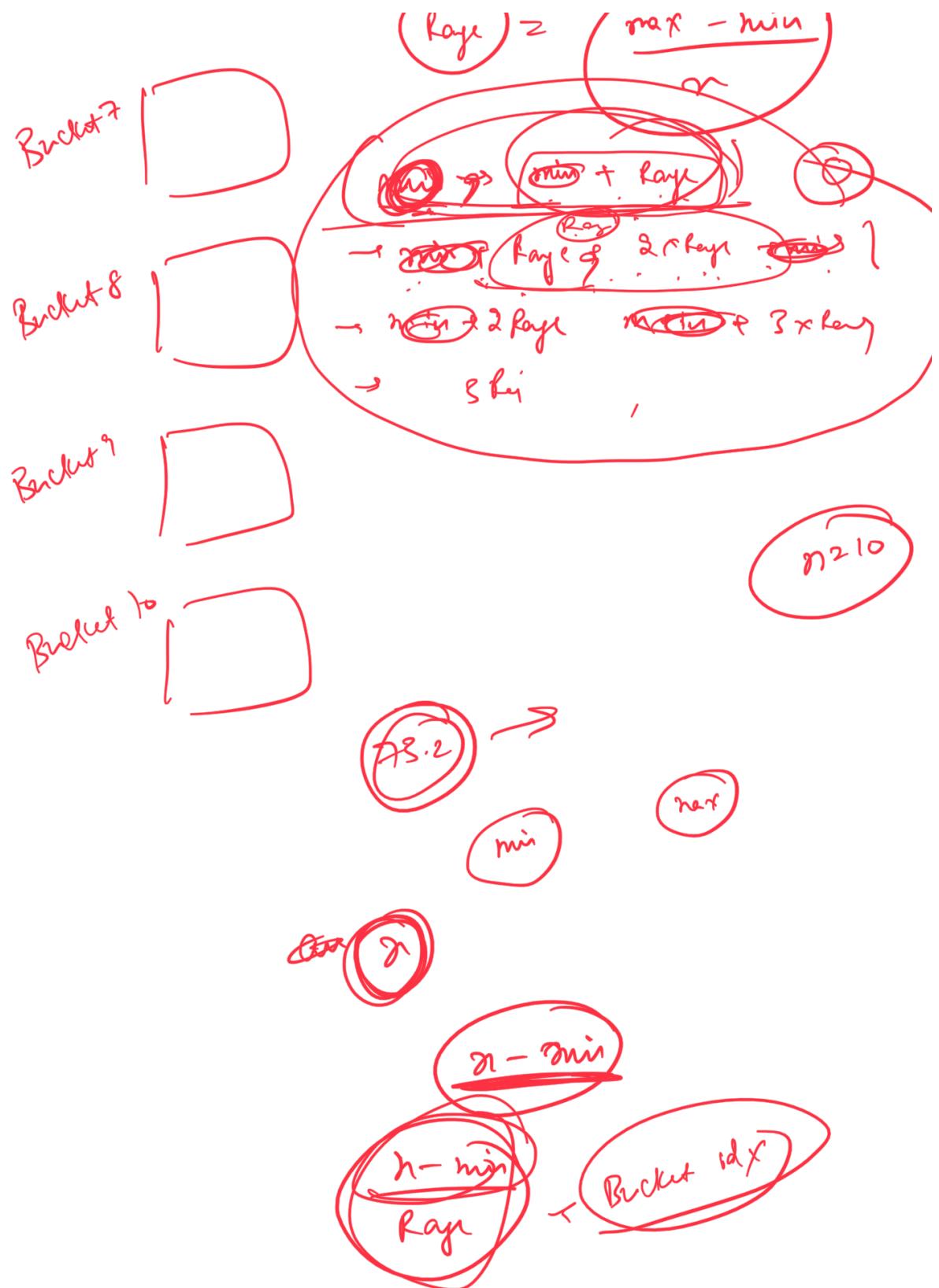


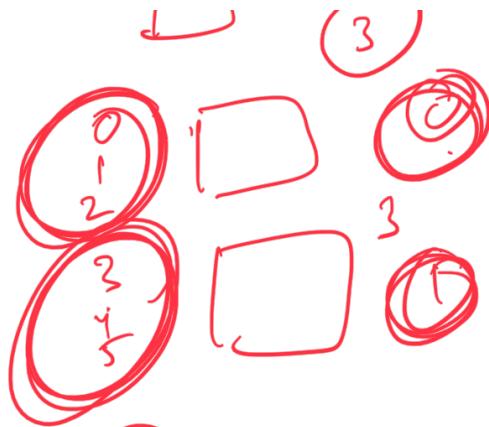
$$\frac{\text{max} - \text{min}}{n}$$

$\frac{10-0}{10}$
 $1/n$









\rightarrow (5)

(8) 3
6/3 → (2)



$7/3 \rightarrow (2)$

$\frac{\text{am (i)} - \text{min}}{\text{range}}$

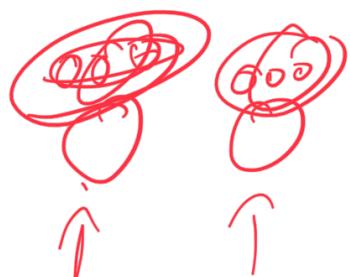


Should be affirm
↑ be 5.!



must

0



0

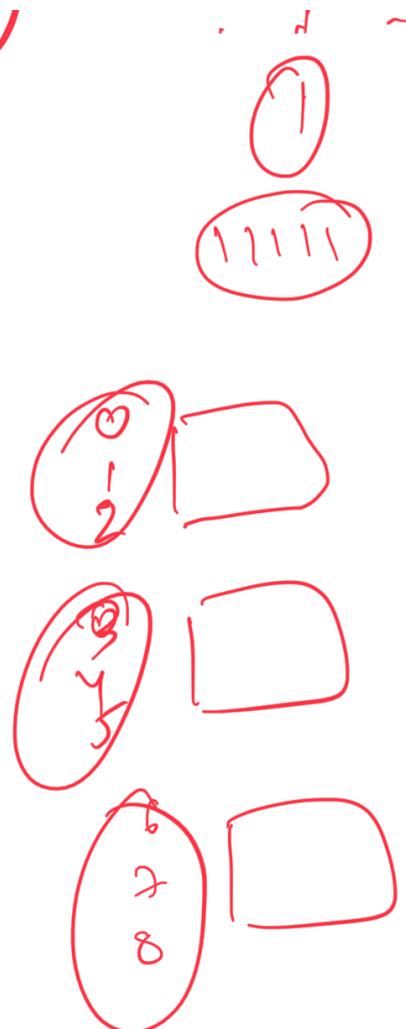
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0

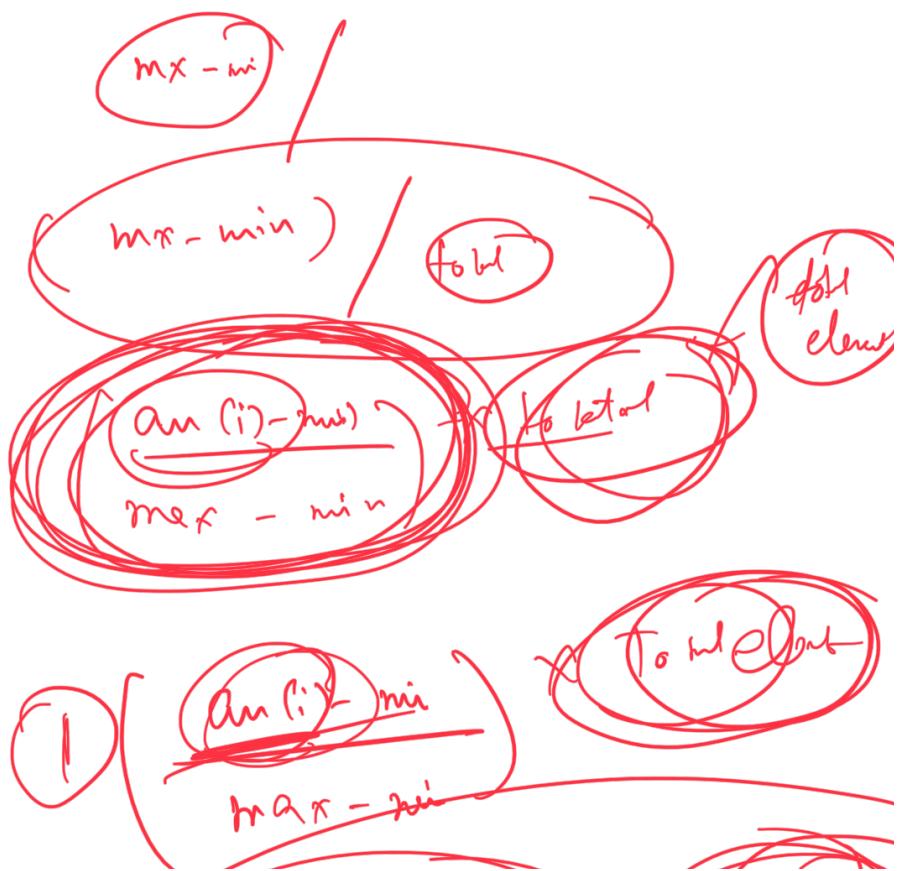
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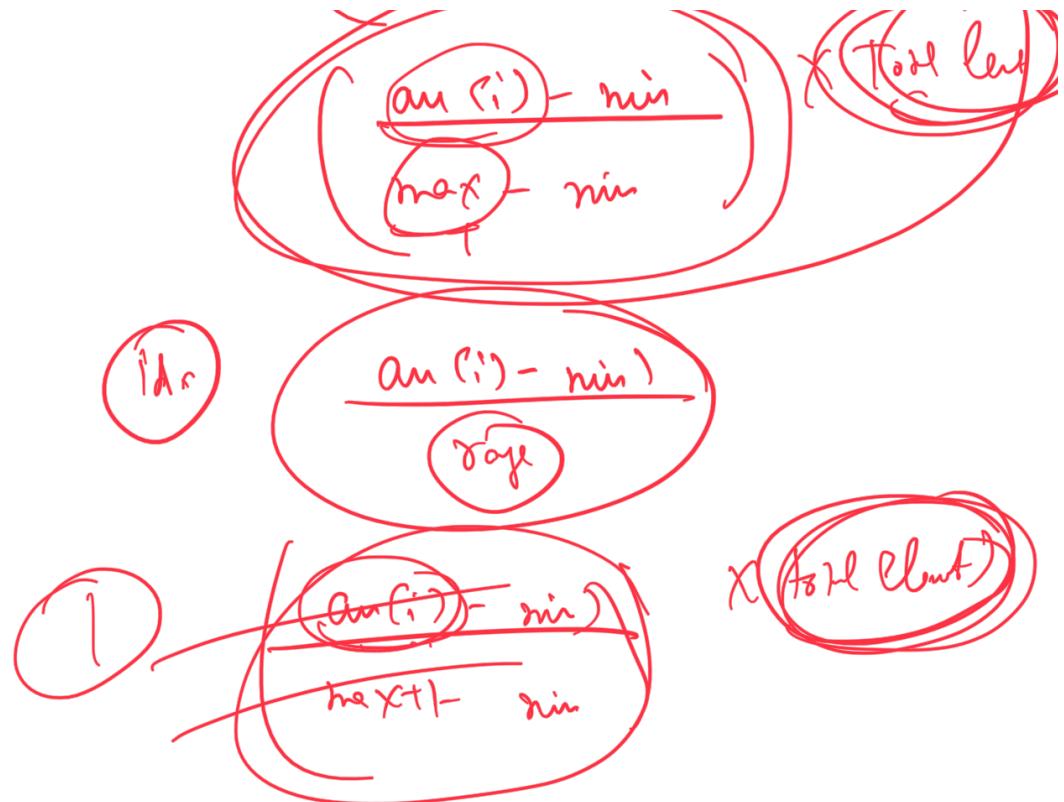
0

(U)



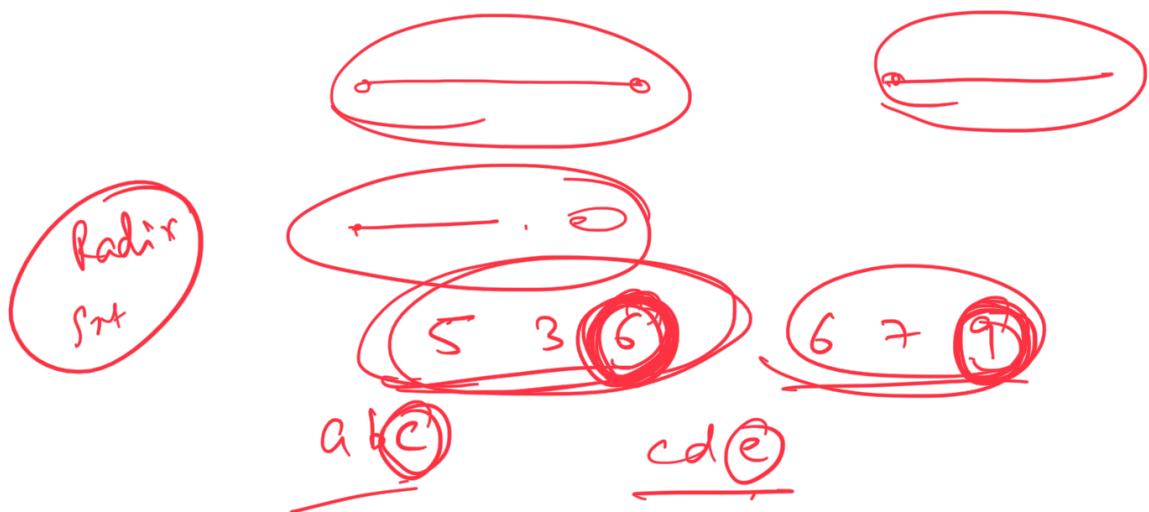
0, 8





→ Radix Sort

It should be applied when number of digits of any number is kind of predicate.



→ 123 456 678 0 (Sorted)

$$\begin{array}{r}
 102 \\
 103 \\
 104 \\
 105 \\
 \hline
 625 \quad 635 \quad 563 \quad 463 \\
 463 \quad 563 \quad 625 \quad 635 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 563 \\
 625 \\
 463 \\
 1258 \\
 \hline
 \end{array}$$

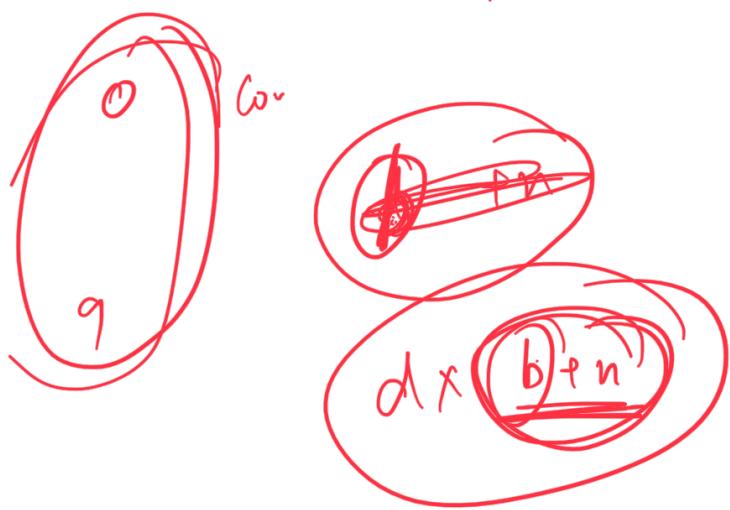
\rightarrow Partial sum to part
 \rightarrow lowest to highest

3, 5, 3, 8, 1

$$681 \quad 563$$

~~Sort the~~
Sorty word
be start

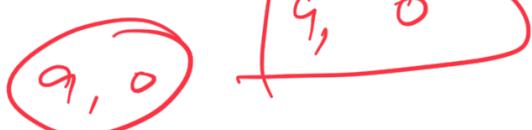
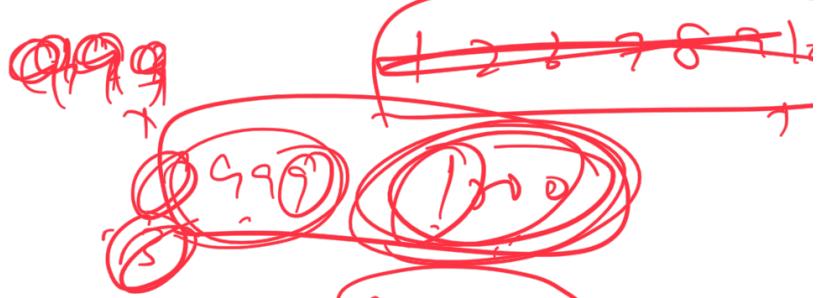
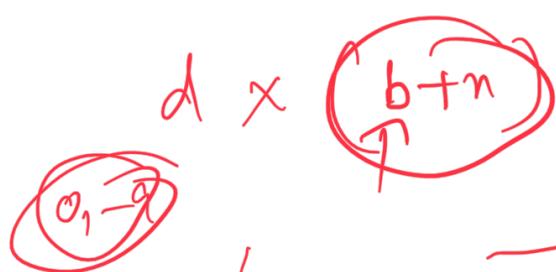
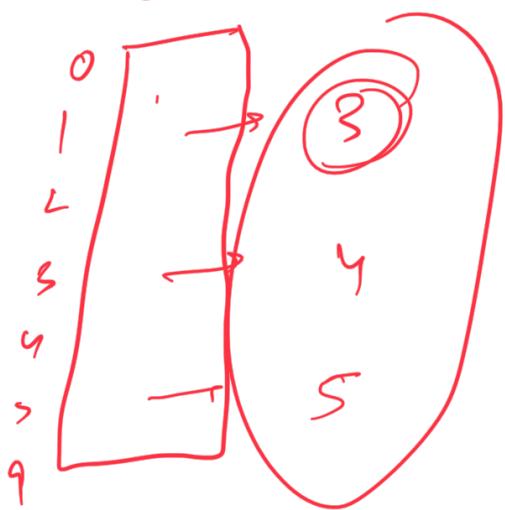
$$\begin{array}{r}
 681 \quad 563 \quad 463 \quad 625 \quad 1258 \\
 \hline
 621 \quad 685 \quad 1256 \quad 463 \quad 563
 \end{array}$$



Mayan
drawback

 max + n

 10



0.



