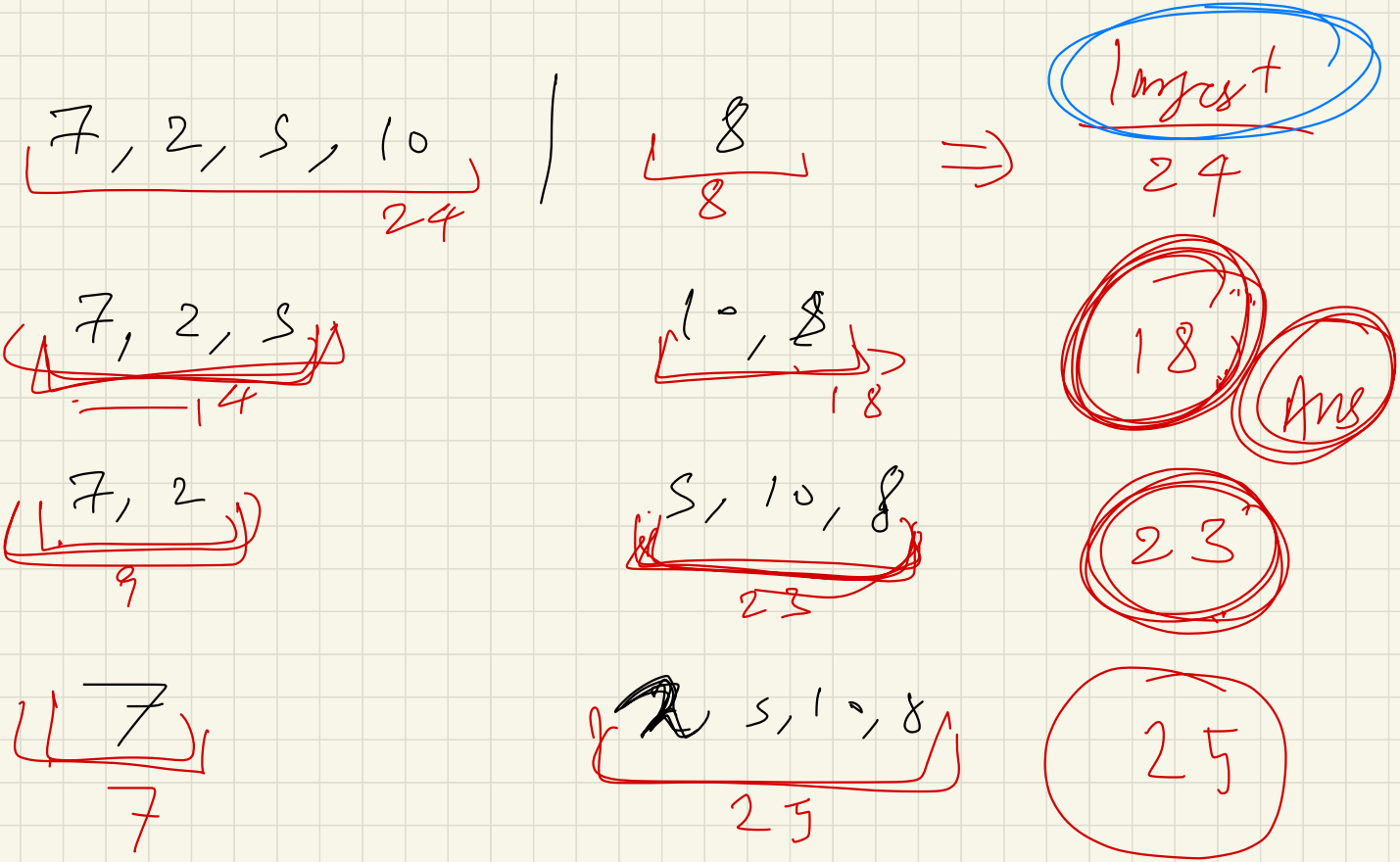
arr = [7, 2, 5, 10, 8] , m = 2



✱① min no. of partitions that we can make = 1

✱② what is the max no. of partitions / m that can be = N

arr = [3, 4, 1, 2] ⟹ [3] [4] [1] [2]

what will be the ans in case 10 :

[7, 2, 5, 10, 8]

Sum of entire array.

= 32

In Case (2) :

Ans for this = max element in array = 4

max value of ans of question = case 1

min value of ans of question = case 2

---

minAns = max value in array

maxAns = sum of all values in array.

[10 , 32]

Here it divided that we use BS.

start = 10 end = 32

$$mid = \frac{st + e}{2} = \frac{42}{2} = 21$$

Try to see if you can split the array with 21 as the max sum:

7, 2, 5, 8, 10

[7, 2, 5], [8, 10]

pieces

2

check 1 if (piece ≤ m) ⇒ end = mid

s = 10 , end = 21

mid = 15

7, 2, 5, 8, 10

[7, 2, 5] , [8] , [10]

piece = 3

check 2 ⇒ start = mid + 1 if piece > m

$s = 16$, $e = 21$

7, 2, 5, 8, 10

$m = 18$

$[7, 2, 5]$, $[8, 10]$ pieces = 2

$\Rightarrow$ $s = 11$ $e = 18$

$m = 17$

7, 2, 5, 8, 10

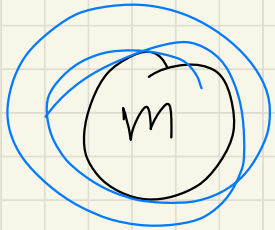
$[7, 2, 5]$, $[8]$, $[17]$ pieces = 3

$$8 = m+1 = 18$$

$$S = 18, \quad e = 18$$

$m = 18$

Ans



// The ans exists definitely, hence by the above 2 steps we will reach it