

FP  $\Rightarrow$  Array ; Integer

- Splits Array into 2  $\rightarrow$  Find Return Times (matching Number)  
 $\rightarrow$  Not Find (-1)

Array { empty  
full  $\rightarrow$  mid =  $\frac{\text{max}}{2}$   
 $\rightarrow$  Looping till (-1)  
Not find

## • GOALS:

- ✓ - KEEP NOTE OF ERRORS (DURING ENCOUNTERING)
- ✓ - BINARY CHOP
- ✓ - TOTAL TESTS, MISSING ELEMENTS (WITH POSITION)
- ✗ - EVERY PASS DIVIDE INTO TWO

↓  
MODIFIED

→ DIRECT GETS THE MULTIPLE OCCURENCE

## • SOLUTION:

✓ INPUTS: ① datasize

② missing (any random num.)

✓ Output: ① missing Elem (gives missing num.)

② All Numbers (Format: (Number: found in X times))

③ Time of occurrence

✓ Values: ① RandomElements (use nth floor → random)  
index

②  $cut = len/2$  (Took roundup)

③ textVal = index of hay (hay[cut])

④ compare  $\begin{cases} \text{needle} \\ \text{textVal} \end{cases}$

└ 0 → found → Test Results

└ 1 → Not found

⑤ Print →

TestTime + Missing Element + Test Results  
(get online)