Write pseudocode + give dec. fcns for:

1. Binary Search (sorted array)
2. Bubble Sort
3. Linear Search (unsorted array)
4. Towers of Hanoi

[in groups.]

Defining a decrementing function:

$$D: S \longrightarrow \mathbb{N}$$

↑ domain: the state space

↑ codomain: must be a well-ordered set. usually, the natural #s.

If needed, define

$S_i :=$ state space at start of ith iteration through the loop.

$S(a,b) :=$ state space immediately after fcn call w/ parameters a and b.

Define the fcn!

$$D(S_i) := \boxed{\;?\,?,\,?\,?\;}$$