

(4)

Find the Duplicate

BF

basically just using two loops for every i element check j from $i \rightarrow n$ if any element is repeated if yes then return that element.

Better

just insert all array elements into ~~the~~ an unordered map & now iterate through the map return the element with value greater than 1.

OPT

Floyd's tortoise hare algorithm

- first assign both T & H to first ele
- move T one step & H 2 steps until they collide at a point (when they collide both points to the same value)
- now assign T to start again
- & move both T & H one step again till it collides
- once it collides return that element cuz that is the duplicate.