EXAMPLE

$n = 9$ (positive integers only)

[2, 2, 7, 5, 2, 2, 0, 6, 4]

DIVIDE

$n/2$ $n/2$

"we divide the array into two halves"

[2, 2, 7, 5, 2] [2, 0, 6, 4]

[2, 2, 7, 5] [2, 7, 5] [2, 7, 5, 2] [2, 0, 6] [6] [6, 4]

(1) (16) [2, 2, 7, 5] vs. (26) [2, 2, 7, 5, 2, 2, 0, 6] — CHOOSE

(2) (6) [6, 4] vs. (29) [2, 7, 5, 2, 7, 0, 6, 4] — CHOOSE

(3) (14) [2, 7, 5] vs. (6) [6] vs. (24) [2, 7, 5, 2, 7, 0, 6] — CHOOSE

CONQUER

the 3 values we select

But how do we return the best recursively?

↳ are we just calculating the subsequences recursively?