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JUNE

THURSDAY

M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31											

MAY 2022

Kadane's Algorithm.

$$\text{nums} = [-2, 1, -3, 4, -1, 2, 1, -5, 4]$$

① Every index can be our final index.

$$\begin{aligned} \text{dp}[i] &= \max(\text{dp}[i-1] + \text{nums}[i], \text{nums}[i]) \\ &= \max(\text{dp}[i-1], 0) + \text{nums}[i] \end{aligned}$$

$$\text{nums} = [-2, 1, -3, 4, -1, 2, 1, -5, 4]$$

$$\text{dp} = [-2, 1, -2, 4, 3, 5, 6, 1, 5]$$

current sum.

$$\begin{aligned} \text{current sum} &= \max(0, \text{current sum}) + \text{nums}[i] \\ \text{max sum} &= \cancel{-2}, \cancel{1}, \cancel{-2}, \cancel{4}, \cancel{3}, \cancel{5}, \cancel{6} \\ &\quad -2, 1, 4, 5, \textcircled{6} \end{aligned}$$