

Array -4

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Max Subarray Product

$$\{2, 3, -2, 4, -1\}$$

$$n = 5$$

Prefix $i=1$. Suffix $i=1$

Ans $\geq \text{INT_Min}$

$$\underbrace{i=0}_{\circ}$$

$$P = 1 \times 2 = 2$$

$$S = 1 \times (-1) = -1$$

$$\text{Ans} = \max(\text{INT_Min}, 2, 1)$$

$$\text{Ans} = 2$$

$$\underbrace{i=1}_{\circ}$$

$$P = 2 \times 3 = 6$$

$$S = (-1) \times 4 = -4$$

$$\text{Ans} \geq \max(2, 6, -4) \Rightarrow 6$$

$$\underbrace{i=2}_{\circ}$$

$$P = 6 \times -2 = -12$$

$$S = -4 \times -2 = 8$$

$$\text{Ans} \geq \max(-12, 8) \Rightarrow 8$$

$$\underbrace{i=3}_{\circ}$$

$$P = -12 \times 4 = -48$$

$$S = 8 \times 3 = 24$$

$$\text{Ans} \geq \max(-48, 24, 8)$$

$$\text{Ans} = 24$$

$$\underbrace{i=4}_{\circ}$$

$$P = -48 \times -1 = 48$$

$$S = 24 \times 2 = 48$$

$$\text{Ans} \geq \max(24, 48, 48) = 48$$

loop ends \rightarrow section ans = 48