

Q1

Given an array, 4 5 2 25,  
 find the next greater element of every element.  
 Eg: 4 5 2 25  
 output: 5 25 25 -1

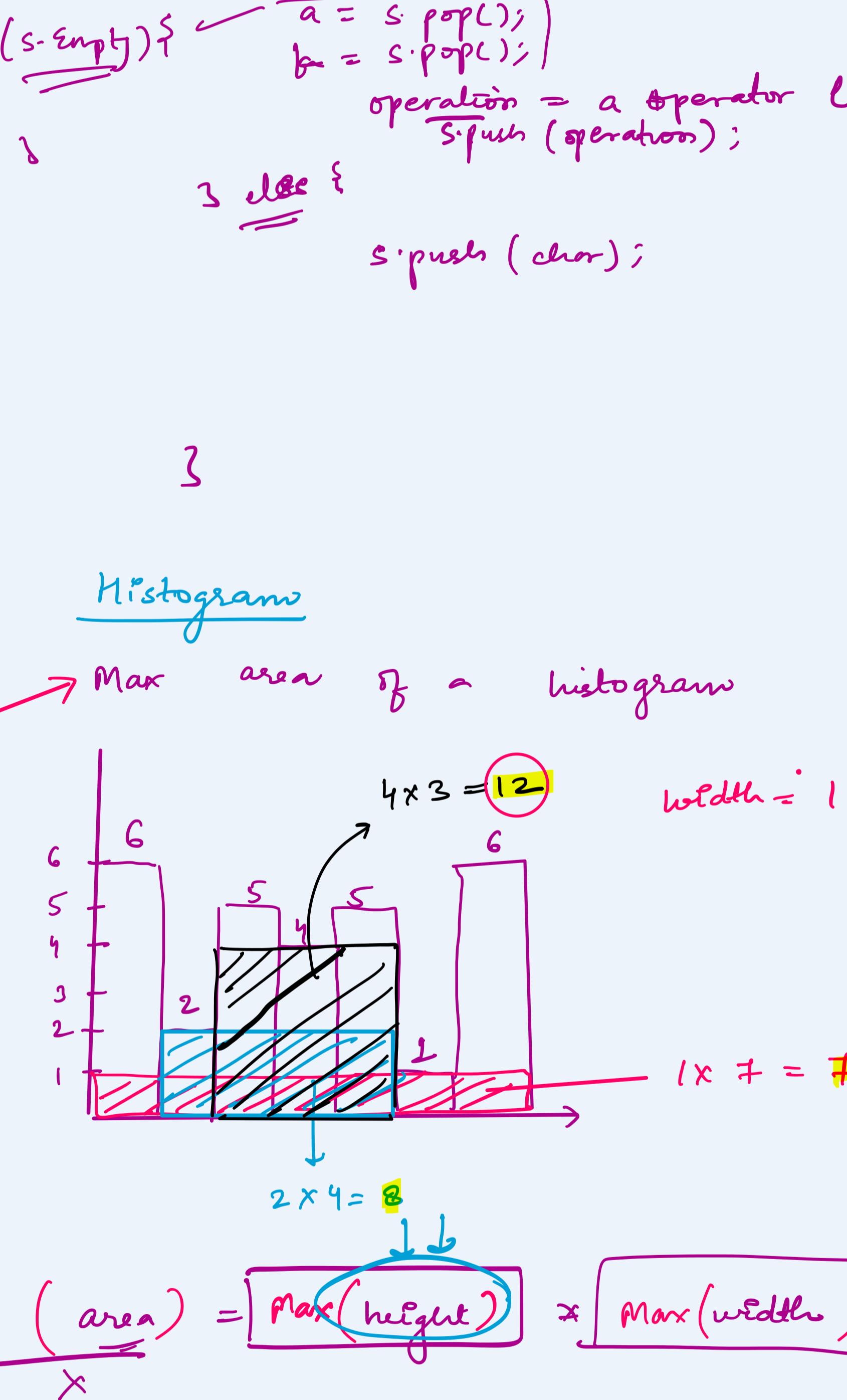
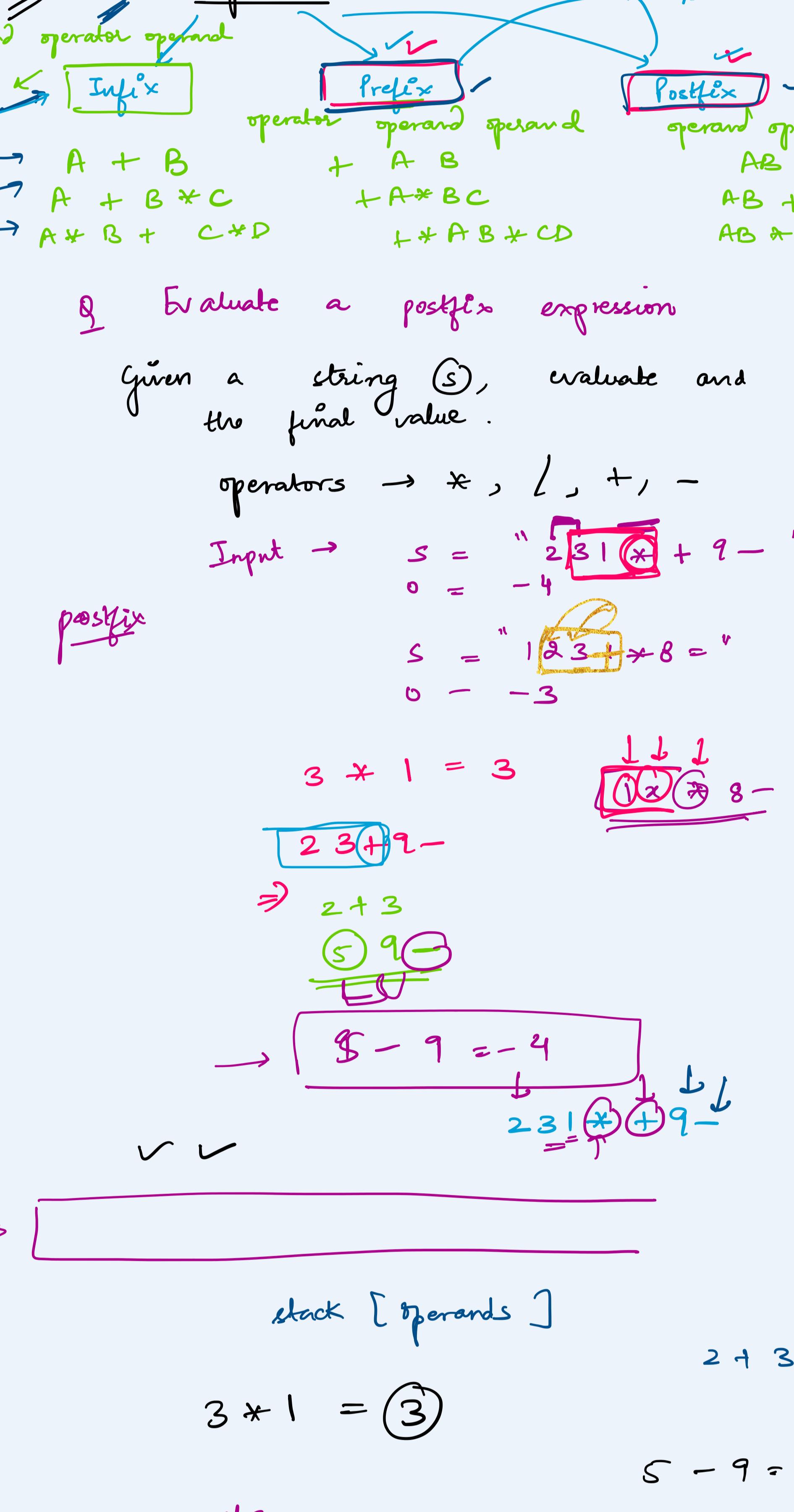
Eg: 10 7 4 2 9 10 11 3 2  
 output: 11 9 9 9 10 11 -1 -1 -1

Eg: 5 4 3 2 1  
 -1 -1 -1 -1 -1

Eg: 5 4 3 2 1 10  
 10 10 10 10 10 -1

Eg: 7 5 4 3 6  
 -1 6 6 6 -1

Eg: 11 4 3 2 10 12  
 12 10 10 10 12 -1



Q Evaluate a postfix expression

Given a string  $s$ , evaluate and find the final value.

operators  $\rightarrow \times, /, +, -$

Input  $\rightarrow s = "2 3 1 \times + 9 -"$   
 $o = -4$   
 $s = "1 2 3 + \times 8 ="$   
 $o = -3$

$$\begin{array}{l} 3 \times 1 = 3 \\ \boxed{2 3 + 9 -} \quad \boxed{1 2 3 + 8 =} \\ \Rightarrow 2 + 3 \\ \boxed{5 9 -} \\ \rightarrow \boxed{5 - 9 = -4} \\ \boxed{2 3 + 9 -} \end{array}$$

stack [operands]

$$3 \times 1 = (3) \quad 5 - 9 = -4$$

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