

# Advanced Coding Practice

## HW Problem 0-0

2023 Fall, CSE4152  
Sogang University



# The maximum subsequence sum

Given a sequence of  $n$  numbers,  $X=(x_1, x_2, \dots, x_n)$ , find a subsequence  $X^*\subset X$  such that

- the numbers in subsequence  $X^*$  are consecutive in  $X$
- the sum of the numbers in  $X^*$  is the maximum over all subsequences of  $X$

$X =$	(31,	-41,	59,	26,	-53,	58,	97,	-93,	-23,	84)
	$x_1$	$x_2$	$x_3$	$x_4$	$x_5$	$x_6$	$x_7$	$x_8$	$x_9$	$x_{10}$
			↑				↑			
			3				7			
					187					
					$X^*=X[3..7]$					

# Code submission

Please submit a C/C++ file that solves the problem.

Filename should be the following: CSE4152 \_student id \_hw00\_0.cpp.

# Input & output

Input

10

31 -41 59 26 -53 58 97 -93  
-23 84

Output

187