

Problem Solving Practice

HW Problem 0

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					
					$X^*=X[3..7]$					

The maximum subsequence sum (contd.)

Rule

- The zero-length subsequence is allowed.

Input

- The first integer specifies the length of a sequence.
- Elements are listed sequentially on the second line.

Output

- Print out the maximum subsequence sum.

Submission

- Please write your code on Sogang Elice.

Input & output

Input

10

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

Output

187