

Soal 1

1. Given an array of integers `nums` and an integer `target`, return *indices of the two numbers such that they add up to target*.

You may assume that each input would have ***exactly one solution***, and you may not use the *same* element twice.

You can return the answer in any order.

Example 1:

Input: `nums = [2,7,11,15]`, `target = 9`

Output: `[0,1]`

Explanation: Because `nums[0] + nums[1] == 9`, we return `[0, 1]`.

Example 2:

Input: `nums = [3,2,4]`, `target = 6`

Output: `[1,2]`

Example 3:

Input: `nums = [3,3]`, `target = 6`

Output: `[0,1]`

Soal 2

2. Given an integer x , return true if x is a **palindrome**, and false otherwise.

Example 1:

Input: $x = 121$

Output: true

Explanation: 121 reads as 121 from left to right and from right to left.

Example 2:

Input: $x = -121$

Output: false

Explanation: From left to right, it reads -121. From right to left, it becomes 121-. Therefore it is not a palindrome.

Example 3:

Input: $x = 10$

Output: false

Explanation: Reads 01 from right to left. Therefore it is not a palindrome.

Soal 3

3. Roman numerals are represented by seven different symbols: I, V, X, L, C, D and M.

Symbol	Value
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

For example, 2 is written as II in Roman numeral, just two ones added together. 12 is written as XII, which is simply X + II. The number 27 is written as XXVII, which is XX + V + II.

Roman numerals are usually written largest to smallest from left to right. However, the numeral for four is not IIII. Instead, the number four is written as IV. Because the one is before the five we subtract it making four. The same principle applies to the number nine, which is written as IX. There are six instances where subtraction is used:

- I can be placed before V (5) and X (10) to make 4 and 9.
- X can be placed before L (50) and C (100) to make 40 and 90.
- C can be placed before D (500) and M (1000) to make 400 and 900.

Given a roman numeral, convert it to an integer.

Example 1:

Input: s = "III"

Output: 3

Explanation: III = 3.

Example 2:

Input: s = "LVIII"

Output: 58

Explanation: L = 50, V = 5, III = 3.

Example 3:

Input: $s = \text{"MCMXCIV"}$

Output: 1994

Explanation: M = 1000, CM = 900, XC = 90 and IV = 4.