

DAY 49

INTERVIEW BIT PROBLEMS :

1. 2 Sum

Given an array of integers, find two numbers such that they add up to a specific target number.

The function **twoSum** should return indices of the two numbers such that they add up to the target, where $\text{index1} < \text{index2}$. Please note that your returned answers (both index1 and index2) are not zero-based.

Put both these numbers in order in an array and return the array from your function. **Note that**, if no pair exists, return empty list.

If multiple solutions exist, output the one where index2 is minimum. If there are multiple solutions with the minimum index2 , choose the one with minimum index1 out of them.

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

Output: index1 = 1, index2 = 2

CODE :

PYTHON

class Solution:

 # @param A : tuple of integers

 # @param k : integer

 # @return a list of integers

 def twoSum(self, A, k):

 hash_map= {}

 for i, x in enumerate(A):

 if k - x in hash_map:

 return hash_map[k - x] + 1, i + 1

 elif x not in hash_map:

 hash_map[x] = i

 return []