SeamLabs

You’re required to do the following tasks . This task includes problem solving tasks , please make sure to do your task with the best performance.

Part one :

- Make a GET api that have two parameters, start number and the end number and should return the count of all numbers except numbers with a 5 in it. The start and the end number are both inclusive!

Examples:

-1,9 -> 1,2,3,4,6,7,8,9 -> Result 8

-4,17 -> 4,6,7,8,9,10,11,12,13,14,16,17 -> Result 12

-40,66 -> 40,41,42,43,44,46,47,48,49,60,61,62,63,64,66 -> Result 14

The start number will always be smaller than the end number. Both numbers can be also negative!
The end number may be a very big integer value like 10^9

- Make a GET api that have one parameter named input_string. that have the alphabetic string you should return the index of this string. index sequence will be like that A=>1, B=>2 ..... , Z=>26, AA=>27, AB=>28 ..... , AZ=>52 , BA=>53 , BB=>54 ..... , BZ => 78 and so on.

  INPUT: input_string Ex: BFG
  OUTPUT: 1515

  INPUT: input_string Ex: AAA
  OUTPUT: 703

  INPUT: input_string Ex: AZA
  OUTPUT: 1353

  INPUT: input_string Ex: ABB
  OUTPUT: 730

● You are given an array *Q* of *N* elements. Each element
In array *Q* represent an integer number *X*.
The goal is for each element *X* in the array we need to minimize the number of steps required in order to reduce this number to zero

You can perform each step in any of the *2* operations on *X* in each move:

1: If we take 2 integers *a* and *b* where (*X == a * b)*
And *(a != 1, b != 1)* then we can change
X = max (a, b)

2: Decrease the value of *X* by 1.

Determine the minimum number of moves required to reduce the value of *X* to *0*.

- Make a function that will have two body parameters:
  N: the Size of array
  Q: Array of size N, each element in array Q
  represents a test query X

- Constrains:

  1 <= N <= 10^4

  0 <= X <= 10^4

- Output:

  Function will return an array of size N, each element in the array will represent the number of steps required to reduce test query *Q[i]* to *0*

- Example:

  N = 2

  Q = [3, 4]

  Returns:

  [3, 3]

  Solution hint:

  For test case *Q[0]*

  3->2->1->0 hence 3 moves

  For test case *Q[1]*

  4->2->1->0 hence 3 moves

In case you have any questions. Please send an

email to amr.foda@seamlabs.com. After doing the task, kindly put your code in a Github repo then send the link of the repo to the same thread of emails.