

SWIFT 考題

1. Given a string, find the first non-repeating character in it and return it's index. If it doesn't exist, return -1.

Examples:

```
s = "leetcode"
return 0.

s = "loveleetcode",
return 2.
```

Note: You may assume the string contain only lowercase letters.

Solution:

```
/**
 * @param String $str Input string
 *
 * @return int The index of first non-repeating character
 */
function firstUniqChar($str) {

}
```

2. Write a function that takes a string as input and returns the string reversed.

Example: Given s = "hello", return "olleh".

3. You are given an n x n 2D matrix representing an image.

Rotate the image by 90 degrees (clockwise).

Note: You have to rotate the image in-place, which means you have to modify the input 2D matrix directly. DO NOT allocate another 2D matrix and do the rotation.

Example 1:

Given input matrix =

```
[  
  [1,2,3],  
  [4,5,6],  
  [7,8,9]  
],
```

rotate the input matrix in-place such that it becomes:

```
[  
  [7,4,1],  
  [8,5,2],  
  [9,6,3]  
]
```

Example 2:

Given input matrix =

```
[  
  [ 5, 1, 9,11],  
  [ 2, 4, 8,10],  
  [13, 3, 6, 7],  
  [15,14,12,16]  
],
```

rotate the input matrix in-place such that it becomes:

```
[  
  [15,13, 2, 5],  
  [14, 3, 4, 1],  
  [12, 6, 8, 9],  
  [16, 7,10,11]  
]
```