

Problem 1817: Finding the Users Active Minutes

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given the logs for users' actions on LeetCode, and an integer

k

. The logs are represented by a 2D integer array

logs

where each

$\text{logs}[i] = [\text{ID}$

i

, time

i

]

indicates that the user with

ID

i

performed an action at the minute

time

i

Multiple users

can perform actions simultaneously, and a single user can perform

multiple actions

in the same minute.

The

user active minutes (UAM)

for a given user is defined as the

number of unique minutes

in which the user performed an action on LeetCode. A minute can only be counted once, even if multiple actions occur during it.

You are to calculate a

1-indexed

array

answer

of size

k

such that, for each

j

(

$1 \leq j \leq k$

),

answer[j]

is the

number of users

whose

UAM

equals

j

Return

the array

answer

as described above

Example 1:

Input:

```
logs = [[0,5],[1,2],[0,2],[0,5],[1,3]], k = 5
```

Output:

```
[0,2,0,0,0]
```

Explanation:

The user with ID=0 performed actions at minutes 5, 2, and 5 again. Hence, they have a UAM of 2 (minute 5 is only counted once). The user with ID=1 performed actions at minutes 2 and 3. Hence, they have a UAM of 2. Since both users have a UAM of 2, answer[2] is 2, and the remaining answer[i] values are 0.

Example 2:

Input:

```
logs = [[1,1],[2,2],[2,3]], k = 4
```

Output:

```
[1,1,0,0]
```

Explanation:

The user with ID=1 performed a single action at minute 1. Hence, they have a UAM of 1. The user with ID=2 performed actions at minutes 2 and 3. Hence, they have a UAM of 2. There is one user with a UAM of 1 and one with a UAM of 2. Hence, answer[1] = 1, answer[2] = 1, and the remaining values are 0.

Constraints:

```
1 <= logs.length <= 10
```

4

```
0 <= ID
```

i

<= 10

9

1 <= time

i

<= 10

5

k

is in the range

[The maximum

UAM

for a user, 10

5

]

Code Snippets

C++:

```
class Solution {  
public:  
    vector<int> findingUsersActiveMinutes(vector<vector<int>>& logs, int k) {
```

```
    }
};
```

Java:

```
class Solution {
public int[] findingUsersActiveMinutes(int[][] logs, int k) {
    }
}
```

Python3:

```
class Solution:
def findingUsersActiveMinutes(self, logs: List[List[int]], k: int) ->
List[int]:
```

Python:

```
class Solution(object):
def findingUsersActiveMinutes(self, logs, k):
    """
    :type logs: List[List[int]]
    :type k: int
    :rtype: List[int]
    """
```

JavaScript:

```
/**
 * @param {number[][]} logs
 * @param {number} k
 * @return {number[]}
 */
var findingUsersActiveMinutes = function(logs, k) {
};
```

TypeScript:

```
function findingUsersActiveMinutes(logs: number[][], k: number): number[] {
```

```
};
```

C#:

```
public class Solution {  
    public int[] FindingUsersActiveMinutes(int[][] logs, int k) {  
        //  
        //  
    }  
}
```

C:

```
/**  
 * Note: The returned array must be malloced, assume caller calls free().  
 */  
int* findingUsersActiveMinutes(int** logs, int logsSize, int* logsColSize,  
int k, int* returnSize) {  
  
}
```

Go:

```
func findingUsersActiveMinutes(logs [][]int, k int) []int {  
  
}
```

Kotlin:

```
class Solution {  
    fun findingUsersActiveMinutes(logs: Array<IntArray>, k: Int): IntArray {  
  
    }  
}
```

Swift:

```
class Solution {  
    func findingUsersActiveMinutes(_ logs: [[Int]], _ k: Int) -> [Int] {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn finding_users_active_minutes(logs: Vec<Vec<i32>>, k: i32) -> Vec<i32>  
    {  
  
    }  
}
```

Ruby:

```
# @param {Integer[][]} logs  
# @param {Integer} k  
# @return {Integer[]}  
def finding_users_active_minutes(logs, k)  
  
end
```

PHP:

```
class Solution {  
  
    /**  
     * @param Integer[][] $logs  
     * @param Integer $k  
     * @return Integer[]  
     */  
    function findingUsersActiveMinutes($logs, $k) {  
  
    }  
}
```

Dart:

```
class Solution {  
    List<int> findingUsersActiveMinutes(List<List<int>> logs, int k) {  
  
    }  
}
```

Scala:

```

object Solution {
    def findingUsersActiveMinutes(logs: Array[Array[Int]], k: Int): Array[Int] =
    {
        }

    }
}

```

Elixir:

```

defmodule Solution do
  @spec finding_users_active_minutes(logs :: [[integer]], k :: integer) :: [integer]
  def finding_users_active_minutes(logs, k) do
    end
  end

```

Erlang:

```

-spec finding_users_active_minutes(Logs :: [[integer()]], K :: integer()) -> [integer()].
finding_users_active_minutes(Logs, K) ->
  .

```

Racket:

```

(define/contract (finding-users-active-minutes logs k)
  (-> (listof (listof exact-integer?)) exact-integer? (listof exact-integer?)))
  )

```

Solutions

C++ Solution:

```

/*
 * Problem: Finding the Users Active Minutes
 * Difficulty: Medium
 * Tags: array, hash
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)

```

```

* Space Complexity: O(n) for hash map
*/
class Solution {
public:
vector<int> findingUsersActiveMinutes(vector<vector<int>>& logs, int k) {

}
};

```

Java Solution:

```

/**
 * Problem: Finding the Users Active Minutes
 * Difficulty: Medium
 * Tags: array, hash
 *
 * Approach: Use two pointers or sliding window technique
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
*/
class Solution {
public int[] findingUsersActiveMinutes(int[][] logs, int k) {

}
}

```

Python3 Solution:

```

"""
Problem: Finding the Users Active Minutes
Difficulty: Medium
Tags: array, hash

Approach: Use two pointers or sliding window technique
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

class Solution:

```

```
def findingUsersActiveMinutes(self, logs: List[List[int]], k: int) ->
List[int]:
    # TODO: Implement optimized solution
    pass
```

Python Solution:

```
class Solution(object):
    def findingUsersActiveMinutes(self, logs, k):
        """
        :type logs: List[List[int]]
        :type k: int
        :rtype: List[int]
        """
```

JavaScript Solution:

```
/**
 * Problem: Finding the Users Active Minutes
 * Difficulty: Medium
 * Tags: array, hash
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/**
 * @param {number[][]} logs
 * @param {number} k
 * @return {number[]}
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var findingUsersActiveMinutes = function(logs, k) {
}
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TypeScript Solution:

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```

* Tags: array, hash
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
* Space Complexity: O(n) for hash map
*/
function findingUsersActiveMinutes(logs: number[][][], k: number): number[] {
}

```

C# Solution:

```

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* Problem: Finding the Users Active Minutes
* Difficulty: Medium
* Tags: array, hash
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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*/
public class Solution {
    public int[] FindingUsersActiveMinutes(int[][][] logs, int k) {
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```

C Solution:

```

/*
* Problem: Finding the Users Active Minutes
* Difficulty: Medium
* Tags: array, hash
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* Approach: Use two pointers or sliding window technique
* Time Complexity: O(n) or O(n log n)
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```

/**
 * Note: The returned array must be malloced, assume caller calls free().
 */
int* findingUsersActiveMinutes(int** logs, int logsSize, int* logsColSize,
int k, int* returnSize) {

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```

Go Solution:

```

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// Tags: array, hash
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// Approach: Use two pointers or sliding window technique
// Time Complexity: O(n) or O(n log n)
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func findingUsersActiveMinutes(logs [][]int, k int) []int {
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```

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class Solution {
    fun findingUsersActiveMinutes(logs: Array<IntArray>, k: Int): IntArray {
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Swift Solution:

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class Solution {
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```

// Problem: Finding the Users Active Minutes
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impl Solution {
    pub fn finding_users_active_minutes(logs: Vec<Vec<i32>>, k: i32) -> Vec<i32>
    {
        }

    }
}

```

Ruby Solution:

```

# @param {Integer[][]} logs
# @param {Integer} k
# @return {Integer[]}
def finding_users_active_minutes(logs, k)

end

```

PHP Solution:

```

class Solution {

    /**
     * @param Integer[][] $logs
     * @param Integer $k
     * @return Integer[]
     */
    function findingUsersActiveMinutes($logs, $k) {

    }
}

```

Dart Solution:

```

class Solution {
    List<int> findingUsersActiveMinutes(List<List<int>> logs, int k) {

```

```
}
```

```
}
```

Scala Solution:

```
object Solution {  
    def findingUsersActiveMinutes(logs: Array[Array[Int]], k: Int): Array[Int] =  
    {  
  
    }  
}
```

Elixir Solution:

```
defmodule Solution do  
  @spec finding_users_active_minutes(logs :: [[integer]], k :: integer) ::  
  [integer]  
  def finding_users_active_minutes(logs, k) do  
  
  end  
end
```

Erlang Solution:

```
-spec finding_users_active_minutes(Logs :: [[integer()]], K :: integer()) ->  
[integer()].  
finding_users_active_minutes(Logs, K) ->  
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Racket Solution:

```
(define/contract (finding-users-active-minutes logs k)  
  (-> (listof (listof exact-integer?)) exact-integer? (listof exact-integer?))  
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