

# 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

logs[i] = [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[j] 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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 * Time Complexity: O(n) or O(n log n)
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 */

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

};
```

### TypeScript 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
*/

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

};

```

### 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
*/

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

    }
}

```

### 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)
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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:

```

// 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

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

}

```

### Kotlin Solution:

```

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

    }
}

```

### Swift Solution:

```

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

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```

### Rust 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

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?))  
  )
```