

Problem 2053: Kth Distinct String in an Array

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

A

distinct string

is a string that is present only

once

in an array.

Given an array of strings

arr

, and an integer

k

, return

the

k

th

distinct string

present in

arr

. If there are

fewer

than

k

distinct strings, return

an

empty string

""

.

Note that the strings are considered in the

order in which they appear

in the array.

Example 1:

Input:

arr = ["d", "b", "c", "b", "c", "a"], k = 2

Output:

"a"

Explanation:

The only distinct strings in arr are "d" and "a". "d" appears 1

st

, so it is the 1

st

distinct string. "a" appears 2

nd

, so it is the 2

nd

distinct string. Since k == 2, "a" is returned.

Example 2:

Input:

arr = ["aaa", "aa", "a"], k = 1

Output:

"aaa"

Explanation:

All strings in arr are distinct, so the 1

st

string "aaa" is returned.

Example 3:

Input:

```
arr = ["a", "b", "a"], k = 3
```

Output:

```
""
```

Explanation:

The only distinct string is "b". Since there are fewer than 3 distinct strings, we return an empty string "".

Constraints:

```
1 <= k <= arr.length <= 1000
```

```
1 <= arr[i].length <= 5
```

```
arr[i]
```

consists of lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
    string kthDistinct(vector<string>& arr, int k) {
        }
};
```

Java:

```
class Solution {  
    public String kthDistinct(String[] arr, int k) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def kthDistinct(self, arr: List[str], k: int) -> str:
```

Python:

```
class Solution(object):  
    def kthDistinct(self, arr, k):  
        """  
        :type arr: List[str]  
        :type k: int  
        :rtype: str  
        """
```

JavaScript:

```
/**  
 * @param {string[]} arr  
 * @param {number} k  
 * @return {string}  
 */  
var kthDistinct = function(arr, k) {  
  
};
```

TypeScript:

```
function kthDistinct(arr: string[], k: number): string {  
  
};
```

C#:

```
public class Solution {  
    public string KthDistinct(string[] arr, int k) {
```

```
}
```

```
}
```

C:

```
char* kthDistinct(char** arr, int arrSize, int k) {  
  
}
```

Go:

```
func kthDistinct(arr []string, k int) string {  
  
}
```

Kotlin:

```
class Solution {  
    fun kthDistinct(arr: Array<String>, k: Int): String {  
  
    }  
}
```

Swift:

```
class Solution {  
    func kthDistinct(_ arr: [String], _ k: Int) -> String {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn kth_distinct(arr: Vec<String>, k: i32) -> String {  
  
    }  
}
```

Ruby:

```
# @param {String[]} arr
# @param {Integer} k
# @return {String}
def kth_distinct(arr, k)

end
```

PHP:

```
class Solution {

    /**
     * @param String[] $arr
     * @param Integer $k
     * @return String
     */
    function kthDistinct($arr, $k) {

    }
}
```

Dart:

```
class Solution {
    String kthDistinct(List<String> arr, int k) {
    }
}
```

Scala:

```
object Solution {
    def kthDistinct(arr: Array[String], k: Int): String = {
    }
}
```

Elixir:

```
defmodule Solution do
  @spec kth_distinct(arr :: [String.t], k :: integer) :: String.t
  def kth_distinct(arr, k) do
```

```
end  
end
```

Erlang:

```
-spec kth_distinct(Arr :: [unicode:unicode_binary()]), K :: integer()) ->  
unicode:unicode_binary().  
kth_distinct(Arr, K) ->  
. . .
```

Racket:

```
(define/contract (kth-distinct arr k)  
  (-> (listof string?) exact-integer? string?)  
)
```

Solutions

C++ Solution:

```
/*  
 * Problem: Kth Distinct String in an Array  
 * Difficulty: Easy  
 * Tags: array, string, 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:  
    string kthDistinct(vector<string>& arr, int k) {  
        . . .  
    }  
};
```

Java Solution:

```

/**
 * Problem: Kth Distinct String in an Array
 * Difficulty: Easy
 * Tags: array, string, 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 String kthDistinct(String[] arr, int k) {
        return null;
    }
}

```

Python3 Solution:

```

"""
Problem: Kth Distinct String in an Array
Difficulty: Easy
Tags: array, string, 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 kthDistinct(self, arr: List[str], k: int) -> str:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

class Solution(object):
    def kthDistinct(self, arr, k):
        """
:type arr: List[str]
:type k: int
:rtype: str
"""

```

JavaScript Solution:

```
/**  
 * Problem: Kth Distinct String in an Array  
 * Difficulty: Easy  
 * Tags: array, string, hash  
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 * Time Complexity: O(n) or O(n log n)  
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 */  
  
/**  
 * @param {string[]} arr  
 * @param {number} k  
 * @return {string}  
 */  
var kthDistinct = function(arr, k) {  
  
};
```

TypeScript Solution:

```
/**  
 * Problem: Kth Distinct String in an Array  
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 */  
  
function kthDistinct(arr: string[], k: number): string {  
  
};
```

C# Solution:

```
/*  
 * Problem: Kth Distinct String in an Array  
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```

```

* Tags: array, string, 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 string KthDistinct(string[] arr, int k) {
        }
    }
}

```

C Solution:

```

/*
 * Problem: Kth Distinct String in an Array
 * Difficulty: Easy
 * Tags: array, string, 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
*/
char* kthDistinct(char** arr, int arrSize, int k) {
}

```

Go Solution:

```

// Problem: Kth Distinct String in an Array
// Difficulty: Easy
// Tags: array, string, 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 kthDistinct(arr []string, k int) string {
}

```

```
}
```

Kotlin Solution:

```
class Solution {  
    fun kthDistinct(arr: Array<String>, k: Int): String {  
          
        }  
    }
```

Swift Solution:

```
class Solution {  
    func kthDistinct(_ arr: [String], _ k: Int) -> String {  
          
        }  
    }
```

Rust Solution:

```
// Problem: Kth Distinct String in an Array  
// Difficulty: Easy  
// Tags: array, string, 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  
  
impl Solution {  
    pub fn kth_distinct(arr: Vec<String>, k: i32) -> String {  
          
        }  
    }
```

Ruby Solution:

```
# @param {String[]} arr  
# @param {Integer} k  
# @return {String}  
def kth_distinct(arr, k)
```

```
end
```

PHP Solution:

```
class Solution {  
  
    /**  
     * @param String[] $arr  
     * @param Integer $k  
     * @return String  
     */  
    function kthDistinct($arr, $k) {  
  
    }  
}
```

Dart Solution:

```
class Solution {  
String kthDistinct(List<String> arr, int k) {  
  
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object Solution {  
def kthDistinct(arr: Array[String], k: Int): String = {  
  
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defmodule Solution do  
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def kth_distinct(arr, k) do  
  
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Erlang Solution:

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-spec kth_distinct(Arr :: [unicode:unicode_binary()]), K :: integer()) ->  
unicode:unicode_binary().  
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