

Problem 2260: Minimum Consecutive Cards to Pick Up

Problem Information

Difficulty: Medium

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

You are given an integer array

cards

where

$\text{cards}[i]$

represents the

value

of the

i

th

card. A pair of cards are

matching

if the cards have the

same

value.

Return

the

minimum

number of

consecutive

cards you have to pick up to have a pair of

matching

cards among the picked cards.

If it is impossible to have matching cards, return

-1

.

Example 1:

Input:

cards = [3,4,2,3,4,7]

Output:

4

Explanation:

We can pick up the cards [3,4,2,3] which contain a matching pair of cards with value 3. Note that picking up the cards [4,2,3,4] is also optimal.

Example 2:

Input:

cards = [1,0,5,3]

Output:

-1

Explanation:

There is no way to pick up a set of consecutive cards that contain a pair of matching cards.

Constraints:

$1 \leq \text{cards.length} \leq 10$

5

$0 \leq \text{cards}[i] \leq 10$

6

Code Snippets

C++:

```
class Solution {
public:
    int minimumCardPickup(vector<int>& cards) {
        }
};
```

Java:

```
class Solution {
public int minimumCardPickup(int[] cards) {
```

```
}
```

```
}
```

Python3:

```
class Solution:  
    def minimumCardPickup(self, cards: List[int]) -> int:
```

Python:

```
class Solution(object):  
    def minimumCardPickup(self, cards):  
        """  
        :type cards: List[int]  
        :rtype: int  
        """
```

JavaScript:

```
/**  
 * @param {number[]} cards  
 * @return {number}  
 */  
var minimumCardPickup = function(cards) {  
  
};
```

TypeScript:

```
function minimumCardPickup(cards: number[]): number {  
  
};
```

C#:

```
public class Solution {  
    public int MinimumCardPickup(int[] cards) {  
  
    }  
}
```

C:

```
int minimumCardPickup(int* cards, int cardsSize) {  
  
}
```

Go:

```
func minimumCardPickup(cards []int) int {  
  
}
```

Kotlin:

```
class Solution {  
    fun minimumCardPickup(cards: IntArray): Int {  
  
    }  
}
```

Swift:

```
class Solution {  
    func minimumCardPickup(_ cards: [Int]) -> Int {  
  
    }  
}
```

Rust:

```
impl Solution {  
    pub fn minimum_card_pickup(cards: Vec<i32>) -> i32 {  
  
    }  
}
```

Ruby:

```
# @param {Integer[]} cards  
# @return {Integer}  
def minimum_card_pickup(cards)  
  
end
```

PHP:

```
class Solution {  
  
    /**  
     * @param Integer[] $cards  
     * @return Integer  
     */  
    function minimumCardPickup($cards) {  
  
    }  
}
```

Dart:

```
class Solution {  
int minimumCardPickup(List<int> cards) {  
  
}  
}
```

Scala:

```
object Solution {  
def minimumCardPickup(cards: Array[Int]): Int = {  
  
}  
}
```

Elixir:

```
defmodule Solution do  
@spec minimum_card_pickup(cards :: [integer]) :: integer  
def minimum_card_pickup(cards) do  
  
end  
end
```

Erlang:

```
-spec minimum_card_pickup(Cards :: [integer()]) -> integer().  
minimum_card_pickup(Cards) ->  
.
```

Racket:

```
(define/contract (minimum-card-pickup cards)
  (-> (listof exact-integer?) exact-integer?))
```

Solutions

C++ Solution:

```
/*
 * Problem: Minimum Consecutive Cards to Pick Up
 * 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 minimumCardPickup(vector<int>& cards) {
}
```

Java Solution:

```
/**
 * Problem: Minimum Consecutive Cards to Pick Up
 * 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 minimumCardPickup(int[] cards) {
```

```
}
```

```
}
```

Python3 Solution:

```
"""
Problem: Minimum Consecutive Cards to Pick Up
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 minimumCardPickup(self, cards: List[int]) -> int:
        # TODO: Implement optimized solution
        pass
```

Python Solution:

```
class Solution(object):

    def minimumCardPickup(self, cards):
        """
:type cards: List[int]
:rtype: int
"""


```

JavaScript Solution:

```
/**
 * Problem: Minimum Consecutive Cards to Pick Up
 * Difficulty: Medium
 * Tags: array, hash
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 * Time Complexity: O(n) or O(n log n)
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 */
```

```

/**
 * @param {number[]} cards
 * @return {number}
 */
var minimumCardPickup = function(cards) {

};

```

TypeScript Solution:

```

/**
 * Problem: Minimum Consecutive Cards to Pick Up
 * 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 minimumCardPickup(cards: number[]): number {
}


```

C# Solution:

```

/*
 * Problem: Minimum Consecutive Cards to Pick Up
 * 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 MinimumCardPickup(int[] cards) {
    }
}
```

```
}
```

C Solution:

```
/*
 * Problem: Minimum Consecutive Cards to Pick Up
 * 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
 */

int minimumCardPickup(int* cards, int cardsSize) {

}
```

Go Solution:

```
// Problem: Minimum Consecutive Cards to Pick Up
// 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 minimumCardPickup(cards []int) int {

}
```

Kotlin Solution:

```
class Solution {
    fun minimumCardPickup(cards: IntArray): Int {
        }

    }
}
```

Swift Solution:

```
class Solution {  
func minimumCardPickup(_ cards: [Int]) -> Int {  
  
}  
}  
}
```

Rust Solution:

```
// Problem: Minimum Consecutive Cards to Pick Up  
// 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)  
// Space Complexity: O(n) for hash map  
  
impl Solution {  
pub fn minimum_card_pickup(cards: Vec<i32>) -> i32 {  
  
}  
}
```

Ruby Solution:

```
# @param {Integer[]} cards  
# @return {Integer}  
def minimum_card_pickup(cards)  
  
end
```

PHP Solution:

```
class Solution {  
  
/**  
 * @param Integer[] $cards  
 * @return Integer  
 */  
function minimumCardPickup($cards) {  
  
}  
}
```

Dart Solution:

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class Solution {  
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object Solution {  
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-spec minimum_card_pickup(Cards :: [integer()]) -> integer().  
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