Problem 1291: Sequential Digits

Problem Information

Difficulty: Medium
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

An integer has

sequential digits

if and only if each digit in the number is one more than the previous digit.

Return a

sorted

list of all the integers in the range

[low, high]

inclusive that have sequential digits.

Example 1:

Input:

low = 100, high = 300

Output:

[123,234]

Example 2:

Input:

low = 1000, high = 13000

Output:

[1234,2345,3456,4567,5678,6789,12345]

Constraints:

10 <= low <= high <= 10^9

Code Snippets

C++:

```
class Solution {
public:
vector<int> sequentialDigits(int low, int high) {

}
};
```

Java:

```
class Solution {
public List<Integer> sequentialDigits(int low, int high) {

}
}
```

Python3:

```
class Solution:
def sequentialDigits(self, low: int, high: int) -> List[int]:
```

Python:

```
class Solution(object):
def sequentialDigits(self, low, high):
"""
:type low: int
:type high: int
:rtype: List[int]
"""
```

JavaScript:

```
/**
* @param {number} low
* @param {number} high
* @return {number[]}
*/
var sequentialDigits = function(low, high) {

};
```

TypeScript:

```
function sequentialDigits(low: number, high: number): number[] {

};
```

C#:

```
public class Solution {
public IList<int> SequentialDigits(int low, int high) {

}
}
```

C:

```
/**
* Note: The returned array must be malloced, assume caller calls free().
*/
int* sequentialDigits(int low, int high, int* returnSize) {

}
```

Go:

```
func sequentialDigits(low int, high int) []int {

}
```

Kotlin:

```
class Solution {
fun sequentialDigits(low: Int, high: Int): List<Int> {

}
}
```

Swift:

```
class Solution {
func sequentialDigits(_ low: Int, _ high: Int) -> [Int] {

}
}
```

Rust:

```
impl Solution {
pub fn sequential_digits(low: i32, high: i32) -> Vec<i32> {

}
}
```

Ruby:

```
# @param {Integer} low
# @param {Integer} high
# @return {Integer[]}
def sequential_digits(low, high)

end
```

PHP:

```
class Solution {

/**
* @param Integer $low
```

```
* @param Integer $high
* @return Integer[]
*/
function sequentialDigits($low, $high) {

}
}
```

Dart:

```
class Solution {
List<int> sequentialDigits(int low, int high) {

}
}
```

Scala:

```
object Solution {
def sequentialDigits(low: Int, high: Int): List[Int] = {

}
}
```

Elixir:

```
defmodule Solution do
@spec sequential_digits(low :: integer, high :: integer) :: [integer]
def sequential_digits(low, high) do

end
end
```

Erlang:

```
-spec sequential_digits(Low :: integer(), High :: integer()) -> [integer()].
sequential_digits(Low, High) ->
.
```

Racket:

```
(define/contract (sequential-digits low high)
(-> exact-integer? exact-integer? (listof exact-integer?))
)
```

Solutions

C++ Solution:

```
/*
* Problem: Sequential Digits
* Difficulty: Medium
* Tags: sort
*
* Approach: Optimized algorithm based on problem constraints
* Time Complexity: O(n) to O(n^2) depending on approach
* Space Complexity: O(1) to O(n) depending on approach
*/

class Solution {
public:
vector<int> sequentialDigits(int low, int high) {

}
};
```

Java Solution:

```
/**
* Problem: Sequential Digits
* Difficulty: Medium
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* Approach: Optimized algorithm based on problem constraints
* Time Complexity: O(n) to O(n^2) depending on approach
* Space Complexity: O(1) to O(n) depending on approach
*/

class Solution {
public List<Integer> sequentialDigits(int low, int high) {

}
```

```
}
```

Python3 Solution:

```
"""
Problem: Sequential Digits
Difficulty: Medium
Tags: sort

Approach: Optimized algorithm based on problem constraints
Time Complexity: O(n) to O(n^2) depending on approach
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
def sequentialDigits(self, low: int, high: int) -> List[int]:
# TODO: Implement optimized solution
pass
```

Python Solution:

```
class Solution(object):
def sequentialDigits(self, low, high):
"""
:type low: int
:type high: int
:rtype: List[int]
"""
```

JavaScript Solution:

```
/**
* Problem: Sequential Digits
* Difficulty: Medium
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*/
```

```
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var sequentialDigits = function(low, high) {

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```

TypeScript Solution:

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function sequentialDigits(low: number, high: number): number[] {

};
```

C# Solution:

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*/

public class Solution {
public IList<int> SequentialDigits(int low, int high) {

}
```

```
}
```

C Solution:

```
/*
* Problem: Sequential Digits
* Difficulty: Medium
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* Approach: Optimized algorithm based on problem constraints
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/**
* Note: The returned array must be malloced, assume caller calls free().
*/
int* sequentialDigits(int low, int high, int* returnSize) {

}
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Go Solution:

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//
// Approach: Optimized algorithm based on problem constraints
// Time Complexity: O(n) to O(n^2) depending on approach
// Space Complexity: O(1) to O(n) depending on approach

func sequentialDigits(low int, high int) []int {

}
```

Kotlin Solution:

```
class Solution {
fun sequentialDigits(low: Int, high: Int): List<Int> {

}
```

```
}
```

Swift Solution:

```
class Solution {
func sequentialDigits(_ low: Int, _ high: Int) -> [Int] {

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Rust Solution:

```
// Problem: Sequential Digits
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impl Solution {
pub fn sequential_digits(low: i32, high: i32) -> Vec<i32> {

}
}
```

Ruby Solution:

```
# @param {Integer} low
# @param {Integer} high
# @return {Integer[]}
def sequential_digits(low, high)

end
```

PHP Solution:

```
class Solution {

/**
* @param Integer $low
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* @param Integer $high
* @return Integer[]
*/
function sequentialDigits($low, $high) {

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