

# Problem 3581: Count Odd Letters from Number

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

You are given an integer

$n$

perform the following steps:

Convert each digit of

$n$

into its

lowercase English word

(e.g.,  $4 \rightarrow \text{"four"}$ ,  $1 \rightarrow \text{"one"}$ ).

Concatenate

those words in the

original digit order

to form a string

$s$

.

Return the number of

distinct

characters in

s

that appear an

odd

number of times.

Example 1:

Input:

$n = 41$

Output:

5

Explanation:

$41 \rightarrow$

"fourone"

Characters with odd frequencies:

'f'

,

'u'

,

'r'

,

'n'

,

'e'

. Thus, the answer is 5.

Example 2:

Input:

$n = 20$

Output:

5

Explanation:

$20 \rightarrow$

"twozero"

Characters with odd frequencies:

't'

,

'w'

,

'z'

,

'e'

,

'r'

. Thus, the answer is 5.

Constraints:

$1 \leq n \leq 10$

9

## Code Snippets

**C++:**

```
class Solution {
public:
    int countOddLetters(int n) {
        }
};
```

**Java:**

```
class Solution {
    public int countOddLetters(int n) {
        }
}
```

**Python3:**

```
class Solution:  
    def countOddLetters(self, n: int) -> int:
```

**Python:**

```
class Solution(object):  
    def countOddLetters(self, n):  
        """  
        :type n: int  
        :rtype: int  
        """
```

**JavaScript:**

```
/**  
 * @param {number} n  
 * @return {number}  
 */  
var countOddLetters = function(n) {  
  
};
```

**TypeScript:**

```
function countOddLetters(n: number): number {  
  
};
```

**C#:**

```
public class Solution {  
    public int CountOddLetters(int n) {  
  
    }  
}
```

**C:**

```
int countOddLetters(int n) {  
  
}
```

**Go:**

```
func countOddLetters(n int) int {  
}  
}
```

**Kotlin:**

```
class Solution {  
    fun countOddLetters(n: Int): Int {  
        }  
    }  
}
```

**Swift:**

```
class Solution {  
    func countOddLetters(_ n: Int) -> Int {  
        }  
    }  
}
```

**Rust:**

```
impl Solution {  
    pub fn count_odd_letters(n: i32) -> i32 {  
        }  
    }  
}
```

**Ruby:**

```
# @param {Integer} n  
# @return {Integer}  
def count_odd_letters(n)  
  
end
```

**PHP:**

```
class Solution {  
  
    /**
```

```
* @param Integer $n
* @return Integer
*/
function countOddLetters($n) {

}
}
```

### Dart:

```
class Solution {
int countOddLetters(int n) {

}
}
```

### Scala:

```
object Solution {
def countOddLetters(n: Int): Int = {

}
}
```

### Elixir:

```
defmodule Solution do
@spec count_odd_letters(n :: integer) :: integer
def count_odd_letters(n) do

end
end
```

### Erlang:

```
-spec count_odd_letters(N :: integer()) -> integer().
count_odd_letters(N) ->
.
```

### Racket:

```
(define/contract (count-odd-letters n)
  (-> exact-integer? exact-integer?))
)
```

## Solutions

### C++ Solution:

```
/*
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
public:
    int countOddLetters(int n) {

    }
};
```

### Java Solution:

```
/**
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

class Solution {
    public int countOddLetters(int n) {

    }
}
```

```
}
```

### Python3 Solution:

```
"""
Problem: Count Odd Letters from Number
Difficulty: Easy
Tags: string, hash

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(n) for hash map
"""

class Solution:

    def countOddLetters(self, n: int) -> int:
        # TODO: Implement optimized solution
        pass
```

### Python Solution:

```
class Solution(object):

    def countOddLetters(self, n):
        """
        :type n: int
        :rtype: int
        """
```

### JavaScript Solution:

```
/**
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

/**
```

```
* @param {number} n
* @return {number}
*/
var countOddLetters = function(n) {

};
```

### TypeScript Solution:

```
/** 
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

function countOddLetters(n: number): number {

};
```

### C# Solution:

```
/*
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

public class Solution {
    public int CountOddLetters(int n) {

    }
}
```

### C Solution:

```
/*
 * Problem: Count Odd Letters from Number
 * Difficulty: Easy
 * Tags: string, hash
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(n) for hash map
 */

int countOddLetters(int n) {

}
```

### Go Solution:

```
// Problem: Count Odd Letters from Number
// Difficulty: Easy
// Tags: string, hash
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

func countOddLetters(n int) int {

}
```

### Kotlin Solution:

```
class Solution {
    fun countOddLetters(n: Int): Int {
        return 0
    }
}
```

### Swift Solution:

```
class Solution {
    func countOddLetters(_ n: Int) -> Int {
```

```
}
```

```
}
```

### Rust Solution:

```
// Problem: Count Odd Letters from Number
// Difficulty: Easy
// Tags: string, hash
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(n) for hash map

impl Solution {
    pub fn count_odd_letters(n: i32) -> i32 {
        //
    }
}
```

### Ruby Solution:

```
# @param {Integer} n
# @return {Integer}
def count_odd_letters(n)

end
```

### PHP Solution:

```
class Solution {

    /**
     * @param Integer $n
     * @return Integer
     */
    function countOddLetters($n) {

    }
}
```

### Dart Solution:

```
class Solution {  
    int countOddLetters(int n) {  
  
    }  
}
```

### Scala Solution:

```
object Solution {  
    def countOddLetters(n: Int): Int = {  
  
    }  
}
```

### Elixir Solution:

```
defmodule Solution do  
  @spec count_odd_letters(n :: integer) :: integer  
  def count_odd_letters(n) do  
  
  end  
end
```

### Erlang Solution:

```
-spec count_odd_letters(N :: integer()) -> integer().  
count_odd_letters(N) ->  
.
```

### Racket Solution:

```
(define/contract (count-odd-letters n)  
  (-> exact-integer? exact-integer?)  
)
```