

# Problem 1360: Number of Days Between Two Dates

## Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

## Problem Description

Write a program to count the number of days between two dates.

The two dates are given as strings, their format is

YYYY-MM-DD

as shown in the examples.

Example 1:

Input:

```
date1 = "2019-06-29", date2 = "2019-06-30"
```

Output:

1

Example 2:

Input:

```
date1 = "2020-01-15", date2 = "2019-12-31"
```

Output:

15

Constraints:

The given dates are valid dates between the years

1971

and

2100

.

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int daysBetweenDates(string date1, string date2) {  
  
    }  
};
```

**Java:**

```
class Solution {  
    public int daysBetweenDates(String date1, String date2) {  
  
    }  
}
```

**Python3:**

```
class Solution:  
    def daysBetweenDates(self, date1: str, date2: str) -> int:
```

**Python:**

```

class Solution(object):
    def daysBetweenDates(self, date1, date2):
        """
        :type date1: str
        :type date2: str
        :rtype: int
        """

```

### JavaScript:

```

/**
 * @param {string} date1
 * @param {string} date2
 * @return {number}
 */
var daysBetweenDates = function(date1, date2) {

};

```

### TypeScript:

```

function daysBetweenDates(date1: string, date2: string): number {

};

```

### C#:

```

public class Solution {
    public int DaysBetweenDates(string date1, string date2) {

    }
}

```

### C:

```

int daysBetweenDates(char* date1, char* date2) {

}

```

### Go:

```

func daysBetweenDates(date1 string, date2 string) int {

```

```
}
```

### Kotlin:

```
class Solution {  
    fun daysBetweenDates(date1: String, date2: String): Int {  
  
    }  
}
```

### Swift:

```
class Solution {  
    func daysBetweenDates(_ date1: String, _ date2: String) -> Int {  
  
    }  
}
```

### Rust:

```
impl Solution {  
    pub fn days_between_dates(date1: String, date2: String) -> i32 {  
  
    }  
}
```

### Ruby:

```
# @param {String} date1  
# @param {String} date2  
# @return {Integer}  
def days_between_dates(date1, date2)  
  
end
```

### PHP:

```
class Solution {  
  
    /**  
     * @param String $date1  
     * @param String $date2
```

```

* @return Integer
*/
function daysBetweenDates($date1, $date2) {

}
}

```

### Dart:

```

class Solution {
  int daysBetweenDates(String date1, String date2) {

  }
}

```

### Scala:

```

object Solution {
  def daysBetweenDates(date1: String, date2: String): Int = {

  }
}

```

### Elixir:

```

defmodule Solution do
  @spec days_between_dates(date1 :: String.t, date2 :: String.t) :: integer
  def days_between_dates(date1, date2) do

  end
end

```

### Erlang:

```

-spec days_between_dates(Date1 :: unicode:unicode_binary(), Date2 ::
unicode:unicode_binary()) -> integer().
days_between_dates(Date1, Date2) ->
.

```

### Racket:

```
(define/contract (days-between-dates date1 date2)
  (-> string? string? exact-integer?)
)
```

## Solutions

### C++ Solution:

```
/*
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
public:
    int daysBetweenDates(string date1, string date2) {

    }
};
```

### Java Solution:

```
/**
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

class Solution {
    public int daysBetweenDates(String date1, String date2) {

    }
}
```

```
}
```

### Python3 Solution:

```
"""
Problem: Number of Days Between Two Dates
Difficulty: Easy
Tags: string, math

Approach: String manipulation with hash map or two pointers
Time Complexity: O(n) or O(n log n)
Space Complexity: O(1) to O(n) depending on approach
"""

class Solution:
    def daysBetweenDates(self, date1: str, date2: str) -> int:
        # TODO: Implement optimized solution
        pass
```

### Python Solution:

```
class Solution(object):
    def daysBetweenDates(self, date1, date2):
        """
        :type date1: str
        :type date2: str
        :rtype: int
        """
```

### JavaScript Solution:

```
/**
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */
```

```

/**
 * @param {string} date1
 * @param {string} date2
 * @return {number}
 */
var daysBetweenDates = function(date1, date2) {

};

```

### TypeScript Solution:

```

/**
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

function daysBetweenDates(date1: string, date2: string): number {

};

```

### C# Solution:

```

/*
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

public class Solution {
    public int DaysBetweenDates(string date1, string date2) {

    }
}

```



```
}
```

### C Solution:

```
/*
 * Problem: Number of Days Between Two Dates
 * Difficulty: Easy
 * Tags: string, math
 *
 * Approach: String manipulation with hash map or two pointers
 * Time Complexity: O(n) or O(n log n)
 * Space Complexity: O(1) to O(n) depending on approach
 */

int daysBetweenDates(char* date1, char* date2) {

}
```

### Go Solution:

```
// Problem: Number of Days Between Two Dates
// Difficulty: Easy
// Tags: string, math
//
// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

func daysBetweenDates(date1 string, date2 string) int {

}
```

### Kotlin Solution:

```
class Solution {
    fun daysBetweenDates(date1: String, date2: String): Int {

    }
}
```

### Swift Solution:

```

class Solution {
    func daysBetweenDates(_ date1: String, _ date2: String) -> Int {

    }
}

```

### Rust Solution:

```

// Problem: Number of Days Between Two Dates
// Difficulty: Easy
// Tags: string, math
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// Approach: String manipulation with hash map or two pointers
// Time Complexity: O(n) or O(n log n)
// Space Complexity: O(1) to O(n) depending on approach

impl Solution {
    pub fn days_between_dates(date1: String, date2: String) -> i32 {

    }
}

```

### Ruby Solution:

```

# @param {String} date1
# @param {String} date2
# @return {Integer}
def days_between_dates(date1, date2)

end

```

### PHP Solution:

```

class Solution {

    /**
     * @param String $date1
     * @param String $date2
     * @return Integer
     */
    function daysBetweenDates($date1, $date2) {

```

```
}  
}
```

### Dart Solution:

```
class Solution {  
  int daysBetweenDates(String date1, String date2) {  
  
  }  
}
```

### Scala Solution:

```
object Solution {  
  def daysBetweenDates(date1: String, date2: String): Int = {  
  
  }  
}
```

### Elixir Solution:

```
defmodule Solution do  
  @spec days_between_dates(date1 :: String.t, date2 :: String.t) :: integer  
  def days_between_dates(date1, date2) do  
  
  end  
end
```

### Erlang Solution:

```
-spec days_between_dates(Date1 :: unicode:unicode_binary(), Date2 ::  
  unicode:unicode_binary()) -> integer().  
days_between_dates(Date1, Date2) ->  
  .
```

### Racket Solution:

```
(define/contract (days-between-dates date1 date2)  
  (-> string? string? exact-integer?)  
)
```

