

Problem 2413: Smallest Even Multiple

Problem Information

Difficulty: [Easy](#)

Acceptance Rate: 0.00%

Paid Only: No

Problem Description

Given a

positive

integer

n

, return

the smallest positive integer that is a multiple of

both

2

and

n

.

Example 1:

Input:

n = 5

Output:

10

Explanation:

The smallest multiple of both 5 and 2 is 10.

Example 2:

Input:

n = 6

Output:

6

Explanation:

The smallest multiple of both 6 and 2 is 6. Note that a number is a multiple of itself.

Constraints:

$1 \leq n \leq 150$

Code Snippets

C++:

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

Java:

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

Python3:

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

Python:

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

JavaScript:

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

TypeScript:

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

C#:

```
public class Solution {  
    public int SmallestEvenMultiple(int n) {
```

```
}
```

```
}
```

C:

```
int smallestEvenMultiple(int n) {  
  
}
```

Go:

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

Kotlin:

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

Swift:

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

Rust:

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

Ruby:

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

end
```

PHP:

```
class Solution {

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

    }
}
```

Dart:

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

}
```

Scala:

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

}
```

Elixir:

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

end
end
```

Erlang:

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

Racket:

```
(define/contract (smallest-even-multiple n)  
(-> exact-integer? exact-integer?)  
)
```

Solutions

C++ Solution:

```
/*  
 * Problem: Smallest Even Multiple  
 * Difficulty: Easy  
 * Tags: math  
 *  
 * 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:  
    int smallestEvenMultiple(int n) {  
  
    }  
};
```

Java Solution:

```
/**  
 * Problem: Smallest Even Multiple  
 * Difficulty: Easy  
 * Tags: math  
 *  
 * 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 int smallestEvenMultiple(int n) {
        }
    }
}

```

Python3 Solution:

```

"""
Problem: Smallest Even Multiple
Difficulty: Easy
Tags: math

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 smallestEvenMultiple(self, n: int) -> int:
        # TODO: Implement optimized solution
        pass

```

Python Solution:

```

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

```

JavaScript Solution:

```

/**
 * Problem: Smallest Even Multiple
 * Difficulty: Easy
 */

```

```

* Tags: math
*
* 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
*/

```

```

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

```

TypeScript Solution:

```

/** 
* Problem: Smallest Even Multiple
* Difficulty: Easy
* Tags: math
*
* 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
*/

```

```

function smallestEvenMultiple(n: number): number {
};

```

C# Solution:

```

/*
* Problem: Smallest Even Multiple
* Difficulty: Easy
* Tags: math
*
* 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

```

```
*/\n\npublic class Solution {\n    public int SmallestEvenMultiple(int n) {\n        }\n    }\n}
```

C Solution:

```
/*\n * Problem: Smallest Even Multiple\n * Difficulty: Easy\n * Tags: math\n *\n * Approach: Optimized algorithm based on problem constraints\n * Time Complexity: O(n) to O(n^2) depending on approach\n * Space Complexity: O(1) to O(n) depending on approach\n */\n\nint smallestEvenMultiple(int n) {\n}\n
```

Go Solution:

```
// Problem: Smallest Even Multiple\n// Difficulty: Easy\n// Tags: math\n//\n// Approach: Optimized algorithm based on problem constraints\n// Time Complexity: O(n) to O(n^2) depending on approach\n// Space Complexity: O(1) to O(n) depending on approach\n\nfunc smallestEvenMultiple(n int) int {\n}
```

Kotlin Solution:

```
class Solution {  
    fun smallestEvenMultiple(n: Int): Int {  
        // Implementation  
    }  
}
```

Swift Solution:

```
class Solution {
    func smallestEvenMultiple(_ n: Int) -> Int {
        if n % 2 == 0 {
            return n
        } else {
            return n * 2
        }
    }
}
```

Rust Solution:

```
// Problem: Smallest Even Multiple
// Difficulty: Easy
// Tags: math
//
// 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

impl Solution {
    pub fn smallest_even_multiple(n: i32) -> i32 {
        if n % 2 == 0 {
            return n;
        } else {
            return n * 2;
        }
    }
}
```

Ruby Solution:

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

PHP Solution:

```
class Solution {
```

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

Dart Solution:

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

Scala Solution:

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

Elixir Solution:

```
defmodule Solution do  
@spec smallest_even_multiple(n :: integer) :: integer  
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end  
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Racket Solution:

```
(define/contract (smallest-even-multiple n)
  (-> exact-integer? exact-integer?))
)
```