

Problem 2796: Repeat String

Problem Information

Difficulty: Easy

Acceptance Rate: 93.21%

Paid Only: Yes

Problem Description

Write code that enhances all strings such that you can call the `string.replicate(x)` method on any string and it will return repeated string `x` times.

Try to implement it without using the built-in method `string.repeat` .

Example 1:

Input: str = "hello", times = 2 **Output:** "hellohello" **Explanation:** "hello" is repeated 2 times

Example 2:

Input: str = "code", times = 3 **Output:** "codecodecode" **Explanation:** "code" is repeated 3 times

Example 3:

Input: str = "js", times = 1 **Output:** "js" **Explanation:** "js" is repeated 1 time

Constraints:

* `1 <= times <= 105` * `1 <= str.length <= 1000`

Follow up: Let's assume, for the sake of simplifying analysis, that concatenating strings is a constant time operation `O(1)`. With this assumption in mind, can you write an algorithm with a runtime complexity of `O(log n)`?

Code Snippets

JavaScript:

```
/**  
 * @param {number} times  
 * @return {string}  
 */  
String.prototype.replicate = function(times) {  
  
}
```

TypeScript:

```
interface String {  
    replicate(times: number): string;  
}  
  
String.prototype.replicate = function(times): string {  
  
}
```