**BACK** 

## Is Infinite Process?





SOLUTIONS 19097

COMMENTS 20



**CODEWRITING** 

SCORE: 300/300

Given integers  $\, a \,$  and  $\, b \,$ , determine whether the following pseudocode results in an infinite loop

```
while a is not equal to b do
  increase a by 1
  decrease b by 1
```

Assume that the program is executed on a virtual machine which can store arbitrary long numbers and execute forever.

## **Example**

- For a = 2 and b = 6, the output should be isInfiniteProcess(a, b) = false;
- For a = 2 and b = 3, the output should be isInfiniteProcess(a, b) = true.

## Input/Output

- [execution time limit] 4 seconds (js)
- [input] integer a

Guaranteed constraints:

```
0 \le a \le 20.
```

• [input] integer b

Guaranteed constraints:

```
0 \le b \le 20.
```

· [output] boolean

true if the pseudocode will never stop, false otherwise.

## [JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
```





