

ISOGRAM

Background: An isogram is a word or sentence that does not contain any repeating letters. The challenge is to write a function that determines if a word or sentence is an isogram.

Challenge: [Codewars](#)

Resources: [MDN Web Docs](#), [w3 Schools](#) and [freeCodeCamp](#)

Notes: The code below is intended to be informational and is not meant to be the only way to write this function. In addition to the function below, I employed other functions and methods to apply and test conditions and facilitate user interaction.

```
function isIsogram(str) {  
  // convert the str to a lowercased array  
  var letters = str.toLowerCase().split("");  
  // get the length of the letter array and assign it  
  var lettersLength = letters.length  
  // create an empty array for comparison to letters array  
  var newLetters = [];  
  // get the length of the new array and assign it  
  var newLettersLength = newLetters.length  
  // Use ForEach() to iterate over each substring in the letters array and compare  
  it to the newLetters array.  
  // if the substring does not exist(indexOf -1) in the newLetters array, then add  
  it.  
  letters.forEach(function(item, i, arr) {  
    if (newLetters.indexOf(item) === -1) {  
      newLetters.push(item);  
    }  
  });  
  // Compare the length the arrays  
  if(newLettersLength === lettersLength) {  
    // If they are strictly equal, then the word IS an isogram, otherwise it is NOT  
    // WHY? Substrings that repeat, will not have an index of -1 and not  
    be added to newLetters array,  
    return true;  
  }else {  
    return false;  
  }  
};  
//TESTING THE FUNCTION  
console.log(isIsogram("Dermatoglyphics")); //true  
console.log(isIsogram("aba")); //false
```

```
console.log(isIsogram("moOse")); //false
console.log(isIsogram(" ")); //true
console.log(isIsogram("FUN% HOME")); //true
console.log(isIsogram("Reskill Americans")); //false
```