JSFromHell.com

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Nearest Number
//JavaScript Repository

Description

Given an ordered numeric array and a number "X", retrieves the index of the nearest number to "X".
Created: 2008.03.14

Code (Download)

```
//+ Carlos R. L. Rodrigues
//@ http://jsfromhell.com/array/nearest-number [rev. #0]

function getNearestNumber(a, n){
    if((l = a.length) < 2)
        return l - 1;
    for(var l, p = Math.abs(a[--l] - n); l--;)
        if(p < (p = Math.abs(a[l] - n)))
            break;
    return l + 1;
}
```

Example (Example)

```
<script type="text/javascript">
//<![CDATA[

var array = [0, -3, 10, -10, 15];

//Must be sorted from the smallest to the highest
array = array.sort(function(a, b){
    return a - b;
});

document.write(
    "Array = [", array, "]<br />Indexes of the nearest numbers to:<br />",
    "5 = ", getNearestNumber(array, 5), "<br />",
    "9 = ", getNearestNumber(array, 9), "<br />",
    "15 = ", getNearestNumber(array, 15), "<br />",
    "-15 = ", getNearestNumber(array, -15), "<br />",
    "-2 = ", getNearestNumber(array, -2)
);

//]]>
</script>
```

Help

getNearestNumber(a: Array, n: Number): Integer
Finds the nearest number to the "n" argument in the array and retrieves its index, or -1 whenever the array is empty.
a array of numbers ***sorted*** from the smallest to the highest
n reference number

Rank (Votes: 20)

○ 0 ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 [Vote]

3.40