

```
1 // sample of arrays to sort
2 var arrayRandom = [9, 2, 5, 6, 4, 3, 7, 10, 1, 8];
3 var arrayOrdered = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
4 var arrayReversed = [10, 9, 8, 7, 6, 5, 4, 3, 2, 1];
5
6 // gaps
7 var gaps = [701, 301, 132, 57, 23, 10, 4, 1];
8
9 function shellsort(array) {
10     var countOuter = 0;
11     var countInner = 0;
12     var countSwap = 0;
13
14     for(var g = 0; g < gaps.length; g++) {
15         var gap = gaps[g];
16         for(var i = gap; i < array.length; i++) {
17             countOuter++;
18             var temp = array[i];
19             for(var j = i; j >= gap && array[j - gap] > temp; j -= gap) {
20                 countInner++;
21                 countSwap++;
22                 array[j] = array[j - gap];
23             }
24             array[j] = temp;
25         }
26     }
27     console.log('outer:', countOuter, 'inner:', countInner, 'swap:', countSwap);
28     return array;
29 }
30
31 shellsort(arrayRandom.slice()); // => outer: 15 inner: 11 swap: 11
32 shellsort(arrayOrdered.slice()); // => outer: 15 inner: 0 swap: 0
33 shellsort(arrayReversed.slice()); // => outer: 15 inner: 13 swap: 13
34
```