

```
1 const
2     size1 = 128,
3     size2 = 512,
4     size3 = 2048,
5     size4 = 8192,
6     size5 = 32768,
7     size6 = 131072,
8     size7 = 524288,
9     size8 = 2097152;
10
11 arrTest(size1);
12 arrTest(size2);
13 arrTest(size3);
14 arrTest(size4);
15 arrTest(size5);
16 arrTest(size6);
17 arrTest(size7);
18 arrTest(size8);
19
20 function arrTest(size) {
21     let array = Array.from(Array(size).keys());
22     console.time("test");
23     for(let i = 0; i < 10000000; i++)
24         binarySearch(array, size+1);
25     console.log("Time elapsed: ");
26     console.timeEnd("test");
27 }
28
29 function binarySearch(array, target) {
30     let first, mid, last;
31     first = 0;
32     last = array.length-1;
33
34     while(first <= last) {
35         mid = Math.ceil((first + last) / 2);
36         if(array[mid] > target)
37             last = mid - 1;
38         else if(array[mid] < target)
39             first= mid + 1;
40         else
41             return mid;
42     }
43     return -1;
44 }
45
```