

```
1 import "dart:core";
2
3 main() {
4     const int
5         size1 = 128,
6         size2 = 512,
7         size3 = 2048,
8         size4 = 8192,
9         size5 = 32768,
10        size6 = 131072,
11        size7 = 524288,
12        size8 = 2097152;
13
14    arrTest(size1);
15    arrTest(size2);
16    arrTest(size3);
17    arrTest(size4);
18    arrTest(size5);
19    arrTest(size6);
20    arrTest(size7);
21    arrTest(size8);
22 }
23
24 void arrTest(int size) {
25     var array = new List<int>.generate(size, (i) => i + 1);
26     var clock = new Stopwatch();
27     clock.start();
28     for(var i = 0; i < 10000000; i++)
29         binarySearch(array, size+1);
30     clock.stop();
31     print("Time elapsed: " + clock.elapsed.toString());
32 }
33
34 int binarySearch(List array, int target) {
35     var first, mid, last;
36     first = 0;
37     last = array.length-1;
38
39     while(first <= last) {
40         mid = ((first + last) / 2).ceil();
41         if(array[mid] > target)
42             last = mid - 1;
43         else if(array[mid] < target)
44             first= mid + 1;
45         else
46             return mid;
47     }
48     return -1;
49 }
50
```