```
1 /****************** 07 ARRAYS **********************/
 2
 3
4 /**
 5
   * --> Two Ways To Create Arrays
 6
 7 const numbers = [43, 56, 33, 23, 36, 5];
 8 \text{ const numbers } 2 = \text{new Array}(22,45,464,5,5,6);
 9 const names = ['Abhishek', 'Dylan', 'Bittu'];
10 const mixed = [22, 'Hello', true, undefined, null, {a:1, b:2}, new Date()];
11
12
13 /**
14 * Get Array Length
15 */
16 console.log(numbers.length);
17
18 /**
19
   * Check if is Array
20 */
21 console.log(Array.isArray(numbers));
22
23 /**
24 * Get Single Value - Indexing
25 * --> Indexing is 'ZERO' Based
   */
26
27 console.log(names[2]);
28
29 /**
30 * Insert into array
31 */
32 \mid names[1] = 'Joker';
33 console.log(names);
34
35 /**
36 * index0f()
37 */
38 console.log(numbers.index0f(36));
39
40 /**
41 * Mutating Arrays
42
   * push() - Add item at the last position.
43
   * unshift() - Add item at the first position.
   * pop() - Remove Item from the end position.
   * shift() - Remove Item from the front position
45
   */
47 numbers.push(250);
48 console.log(numbers);
49 numbers.unshift(111);
50 console.log(numbers);
51 numbers.pop();
52 console.log(numbers);
53 numbers.shift();
54 console.log(numbers);
55
56 /**
57
   * Splice Array
58 * --> splice()
59
   */
60 numbers.splice(1, 3);
```

```
61 console.log(numbers);
62
63 /**
64 * Reverse Array
65 * --> reverse()
66 */
67 numbers.reverse();
68 console.log(numbers);
69
70 /**
71 * Concatenate array
72 */
 73 const joined = names.concat(mixed);
74 console.log(joined);
75
76 /**
77 * Sorting Arrays
78 * --> sort()
79 */
80 sortedNames = names.sort();
81 console.log(sortedNames);
83 let num = [43, 56, 33, 23, 36, 5];
84 let sortedNum = num.sort();
85 console.log(sortedNum);
86 /**
87 * @GOTCHA
 88 * sort() method sort numbers alphabetically, so provide comparator function
   to get ASCENDING OR DESCENDING order.
89 */
90
91 // ASCENDING
92 const sortedNumASC = num.sort(function(x, y) {
       return x - y;
94 });
95 console.log(sortedNumASC);
96 // DESCENDING
97 const sortedNumDESC = num.sort(function(x, y) {
98
       return y - x;
99 });
100 console.log(sortedNumDESC);
101
102 /**
    * FIND IN ARRAY
103
104 * --> find()
105 */
106 const foundName = names.find(function(name) {
       return name.toLowerCase() === 'abhishek';
107
108 });
109 console.log(foundName);
```