

Ilhamsyah Putra

Front End Batch 12

Assignment Day 8

1. Code

```
DAY 8 > Assignment.js > ...
1 // Assignment Day 8 - Ilhamsyah Putra
2
3
4 let arr = [10,22,67,75,80,66];
5 let num = 12;
6
7
8 //=====
9
10
11 //1. Check if the number 12 is in the array above
12 console.log("\n=====");
13 console.log("1. Check if the number 12 is in the array above");
14
15 function sequentialSearch(arr, data){
16     for (let i = 0; i < arr.length; i++) {
17         console.log(arr[i] + " " + data);
18         if (arr[i] == data){
19             return true;
20         }
21     }
22     return false;
23 }
24
25
26 sequentialSearch(arr, num)? console.log("\n"+ num + " is in the array")
27 : console.log("\n"+ num + " is not in the array")
28
29
30
31
32
```

```
DAY 8 > Assignment.js > ...
35
36 //2. sort the array with the bubble sort
37 console.log("\n=====");
38 console.log("2. sort the array with the bubble sort");
39
40 function bubbleSort (arr){
41     for (let i = 0; i<arr.length; i++){
42         for (let j = 0; j<(arr.length-i-1); j++){
43             if (arr[j]> arr[j+1]){
44                 [arr[j], arr[j+1]] = [arr[j+1], arr[j]];
45             }
46         }
47     }
48     console.log("Bubble Sort-ed = " + arr);
49 };
50
51 bubbleSort (arr);
52
53
54
55
56
57
```

```

63 //3. sort the array with the selection sort
64 console.log("\n=====n");
65 console.log("3. sort the array with the selection sort");
66
67
68 function selectionSort(inputArr){
69     let n = arr.length;
70
71     for (let i = 0; i<n; i++){
72         let min = i;
73
74         for(let j = i +1; j<n ; j++){
75
76             // console.log('Min Index : ' + min);
77             // console.log('i2', i);
78             // console.log('Arr j' , inputArr[j]);
79             // console.log('Min Value', inputArr[min]);
80             // console.log('Value:' , inputArr[j] < inputArr[min]);
81             // console.log("=====n");
82
83             if (inputArr[j]< inputArr[min]){
84                 min = j;
85                 // console.log ('Min After Validating :', min);
86             }
87
88         }
89
90         // console.log('Min :', min);
91         // console.log('Last i : ', i);
92
93         if (min != i) {
94
95             // console.log ('Swapping Element Array : ', min , i);
96             [inputArr[i], inputArr[min]] = [inputArr[min], inputArr[i]]
97         }
98
99         // console.log(arr);
100     }
101
102     return inputArr;
103 }
104
105 console.log(selectionSort(arr));
106
107
108 console.log("\n=====n");

```

2. Hasil

```

PS C:\Users\hamil\Desktop\Materi Pelajaran\Dibimbing.id Batch 12 - FE\DAY 8> no
de .\Assignment.js

=====

1. Check if the number 12 is in the array above
10 12
22 12
67 12
75 12
80 12
66 12

12 is not in the array

=====

2. sort the array with the bubble sort
Bubble Sort-ed = 10,22,66,67,75,80

=====

3. sort the array with the selection sort
[ 10, 22, 66, 67, 75, 80 ]

=====

```