Array Logical Questions in JavaScript

Q-1. Given two array A[0....n-1] and B[0....m-1] of size n and m respectively, representing two numbers such that every element of arrays represent a digit. For example, A[] = { 1, 2, 3} and B[] = { 2, 1, 4 } represent 123 and 214 respectively. The task is to find the sum of both the number. In above case, answer is 337.

Sample Input :

```
Input : n = 3, m = 3
        a[] = { 1, 2, 3 }
        b[] = { 2, 1, 4 }
Output : 337
123 + 214 = 337

Input : n = 4, m = 3
        a[] = { 9, 5, 4, 9 }
        b[] = { 2, 1, 4 }
Output : 9763
```

Q-2. Given an array arr of size N, the task is to find the largest element in the given array.

Sample Input :

```
Input: arr[] = {10, 20, 4}
Output: 20

Input : arr[] = {20, 10, 20, 4, 100}
Output : 100
```

Q-3. Given an array arr size of N, the task is to find the sum of all elements in the given array.

Sample Input :

Input : arr[]={10,20,4}

Output : 34

Q-4. Given an array arr size of N, the task is to sort the elements in ascending order using for loop only no inbuilt methods should be used.

Sample Input :

```
Original array: [1, 2, 99, 9, 8, 7, 6, 0, 5, 4, 3]
Sorted array: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 99]
```

Q-5. Given an array of n integers. The task is to print the duplicates in the given array. If there are no duplicates then print -1.

Sample Input :

```
Input: {2, 10,10, 100, 2, 10, 11,2,11,2}
Output: 2 10 11

Input: {5, 40, 1, 40, 100000, 1, 5, 1}
Output: 5 40 1
```

Q-6. Given an unsorted array A of size N, the task is to find the minimum and maximum values that can be calculated by adding exactly N-1 elements.

Sample Input :

```
Input: a[] = {13, 5, 11, 9, 7}
Output: 32 40
Explanation: Minimum sum is 5 + 7 + 9 + 11 = 32 and maximum sum is 7 +
9 + 11 + 13 = 40.
```

Q-7. Given a number n, we need to find the sum of its digits such that:

Explanation :

```
If n < 10
    digSum(n) = n
Else
    digSum(n) = Sum(digSum(n))
```

Sample Input :

```
Input : 1234
Output : 1
Explanation : The sum of 1+2+3+4 = 10,
              digSum(x) == 10
              Hence ans will be 1+0 = 1


Input : 5674
Output : 4
```

Q-8. Given an array arr of size N, the task is to reverse the elements in array.

Sample Input :

```
Original Array:
[ 1, 2, 3, 4, 5 ]
Reversed Array:
[ 5, 4, 3, 2, 1 ]
```

Q-9. Given an array of integers, our task is to write a program that efficiently finds the second largest element present in the array.

Sample Input :

```
Input: arr[] = {12, 35, 1, 10, 34, 1}
Output: The second largest element is 34.
Explanation: The largest element of the
array is 35 and the second
largest element is 34
```

Q-10. Given an array of Integers, the task is to write a program than doubles the elements in array using reduce. Please note that you cannot create another variable.

Sample Input :

Original array arr[]={1,2,3,4,5,6}

Doubled Array arr[]={2,4,6,8,10,12}