(DAY :2)

JAVA SCRIPT

6):Question: Find the index of the first occurrence of a specific element in an array.

SOURCE CODE:

```
array=[1,2,3,4,5,6,7];
elementtofind=4;
function findindex(array,elementtofind){

    for(let i=0;i<array.length-1;i++){
        if(array[i]===elementtofind){
            return i;

        }

    }
    return -1;


    }
    const index=findindex(array,elementtofind);
    console.log("index of element to find",index)
```

OUTPUT:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

C:\Program Files\nodejs\node.exe .\affan.js
index of element to find 3
```

7): Question: Remove all duplicates from an array without built-in methods.

SOURCE CODE:

```
arrayduplicate=[1,1,2,2,3,4,5,6,6,7,7];
function removedup(arrayduplicate){
    let result=[]
    for(let i=0;i<arrayduplicate.length-1;i++){
        let isduplicate=false;
        for(let j=0;j<result.length;j++){
            if(arrayduplicate[i]==result[j]){
                isduplicate=true;
                break;
            }

        }
        if(!isduplicate){
            result.push(arrayduplicate[i])
        }
    }
    return result;

}
let arraywihoutduplicate=removedup(arrayduplicate);
console.log("remove duplicate",arraywihoutduplicate);
```

(DAY :2)

OUTPUT:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

  C:\Program Files\nodejs\node.exe .\affan.js
> remove duplicate (7) [1, 2, 3, 4, 5, 6, 7]
```

8):Question: Sort the array in ascending and descending without built-in methods.

SOURCE CODE:

```js
// ascending order
function SortAscending(array) {
    let n = array.length;
    for (let i = 0; i < n - 1; i++) {
        for (let j = 0; j < n - i - 1; j++) {
            if (array[j] > array[j + 1]) {
                // Swap elements
                let temp = array[j];
                array[j] = array[j + 1];
                array[j + 1] = temp;
            }
        }
    }
    return array;
}

// descending order
function SortDescending(array) {
    let n = array.length;
    for (let i = 0; i < n - 1; i++) {
        for (let j = 0; j < n - i - 1; j++) {
            if (array[j] < array[j + 1]) {
                // Swap elements
                let temp = array[j];
                array[j] = array[j + 1];
                array[j + 1] = temp;
            if (array[j] < array[j + 1]) {
                // Swap elements
                let temp = array[j];
                array[j] = array[j + 1];
                array[j + 1] = temp;
            }
        }
    }
    return array;
}

let unsortedArray = [5, 2, 8, 1, 4];
let ascendingArray = SortAscending([unsortedArray]);
let descendingArray = SortDescending([unsortedArray]);

console.log("Original Array:", unsortedArray);
console.log("Ascending Order:", ascendingArray);
console.log("Descending Order:", descendingArray);s
```

(DAY :2)

OUTPUT:

```
PS C:\Users\iakbe\OneDrive\Desktop\affan> node affan.js
Original Array: [ 5, 2, 8, 1, 4 ]
Ascending Order: [ [ 5, 2, 8, 1, 4 ] ]
Descending Order: [ [ 5, 2, 8, 1, 4 ] ]
PS C:\Users\iakbe\OneDrive\Desktop\affan> []
```

9):Question: Print all even numbers between 1 and 20 using a while loop.

SOURCE CODE:

```js
array=[,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20];
i=0;
while(i<array.length-1){
    if(array[i]%2==0){
        console.log(array[i]);
    }
    }
    i++;
}
```
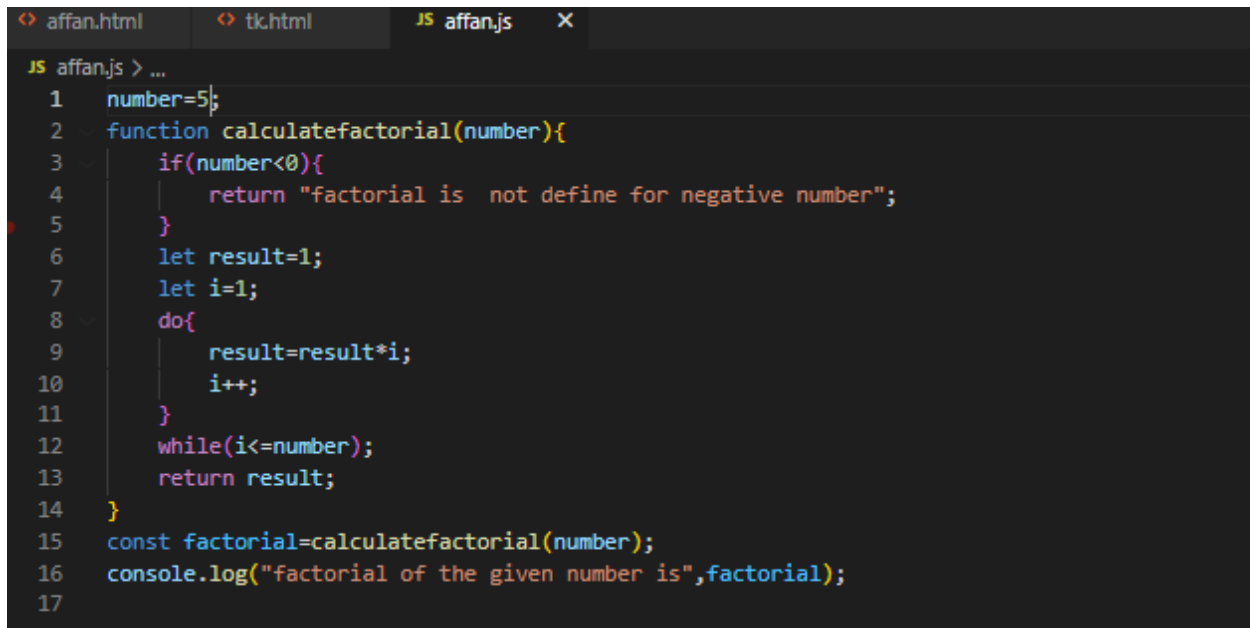
OUTPUT:

```
PROBLEMS  1   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

C:\Program Files\nodejs\node.exe .\affan.js
2
4
6
8
10
12
14
16
18
```
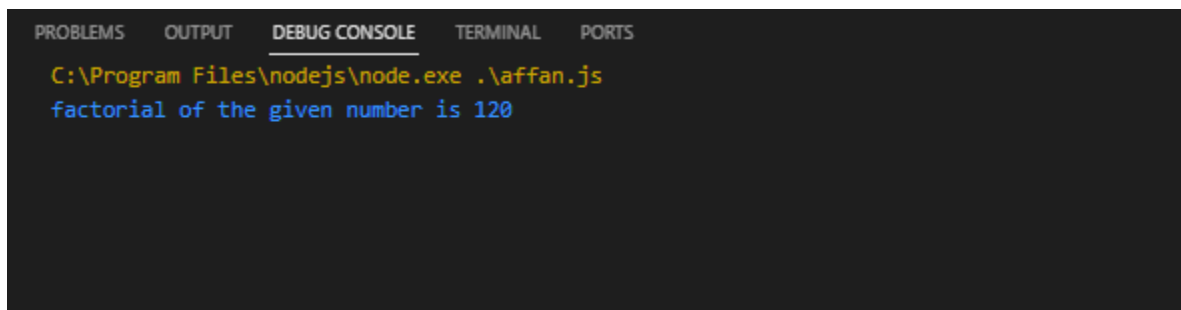
(DAY :2)

10): Question: Calculate the factorial of a number using a do-while loop.

SOURCE CODE:

```javascript
number=5;
function calculatefactorial(number){
    if(number<0){
        return "factorial is  not define for negative number";
    }
    let result=1;
    let i=1;
    do{
        result=result*i;
        i++;
    }
    while(i<=number);
    return result;
}
const factorial=calculatefactorial(number);
console.log("factorial of the given number is",factorial);
```

OUTPUT:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

 C:\Program Files\nodejs\node.exe .\affan.js
 factorial of the given number is 120
```