

( DAY:3 )

## JAVA SCRIPT

11):Question: Iterate through the properties of an object using a for-in loop.

SOURCE CODE:

```
JS affan.js > ...
1  let user={
2      name:"affan",
3      age:19,
4      occ:"engineer",
5  };
6  for (let property in user){
7      if(user.hasOwnProperty(property)){
8          console.log(property+": "+user[property]);
9      }
10 }
```

OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
C:\Program Files\nodejs\node.exe .\affan.js
name:affan
age:19
occ:engineer
```

12):Question: Loop through an array using a for-of loop and double each element.

SOURCE CODE:

```
JS affan.js > ...
1  function doublearrayelement(arr){
2      let doublearray=[];
3      for(let element of arr){
4          doublearray.push(element*2);
5      }
6      return doublearray;
7  }
8  let originalarray=[1,2,3,4,5,6];
9  const result=doublearrayelement(originalarray);
10 console.log("double element array |: " +result);
```

## ( DAY:3 )

OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

C:\Program Files\nodejs\node.exe .\affan.js
double element array : 2,4,6,8,10,12
```

13):Question: Check if a number is even or odd and return a corresponding message.

SOURCE CODE:

```
affan.html  tkhtml  JS affan.js  X

JS affan.js > ...
1  array=[1,2,3,4,5,6,7,8,9,10]
2  for(let i=0;i<=array.length-1;i++){
3      if(array[i]%2==0){
4          console.log(array[i]+"even number in the given array");
5      }
6      else{
7          console.log(array[i]+"odd number in the given array");
8      }
9  }
```

OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

1odd number in the given array
2even number in the given array
3odd number in the given array
4even number in the given array
5odd number in the given array
6even number in the given array
7odd number in the given array
8even number in the given array
9odd number in the given array
10even number in the given array
```

## ( DAY:3 )

14):Question: Find the maximum of three numbers using nested ternary operators.

SOURCE CODE:

```
JS affan.js > ...
1  function findmaxnum(a,b,c){
2      let max =(a>b)?((a>c)?a:c):((b>c)?b:c);
3      return max
4  }
5  let num1=7;
6  let num2=14;
7  let num3=18;
8  const result=findmaxnum(num1,num2,num3);
9  console.log("the maximum of:"+result)
```

OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
C:\Program Files\nodejs\node.exe .\affan.js
the maximum of:18
```

15): Question: Determine if a year is a leap year or not.

SOURCE CODE:

```
JS affan.js > isleapyear
1  function isleapyear(year){
2      if((year%4===0 && year%100!===0) || (year%400===0)){
3          return true;
4      }
5      else{
6          return false;
7      }
8  }
9  let yearcheck=2024;
10 let result=isleapyear(yearcheck);
11 console.log(yearcheck+"is a leap year:"+result);
```

OUTPUT:

```
PS C:\Users\iakbe\OneDrive\Desktop\affan> node affan.js
2024is a leap yeartrue
PS C:\Users\iakbe\OneDrive\Desktop\affan> 
```

**( DAY:3 )**