1) Write a JavaScript program to implement Bubble Sort. –“eight.js”

```
function swap(arr, first_Index, second_Index){
    var temp = arr[first_Index];
    arr[first_Index] = arr[second_Index];
    arr[second_Index] = temp;
}

function bubble_Sort(arr){

    var len = arr.length,
        i, j, stop;

    for (i=0; i < len; i++){
        for (j=0, stop=len-i; j < stop; j++){
            if (arr[j] > arr[j+1]){
                swap(arr, j, j+1);
            }
        }
    }

    return arr;
}
myArray=[3, 0, 2, 5, -1, 4, 1];
console.log("Original array: " + myArray);
var sortedArray = bubble_Sort(myArray);
console.log("Sorted array: " + sortedArray);
```

Expected Output:

2) Write a JavaScript program to perform a binary search.   – “four.js”

```
let iterativeFunction = function (arr, x) {
    let start=0, end=arr.length-1;
    while (start<=end){
        let mid=Math.floor((start + end)/2);
        if (arr[mid]===x) return true;
        else if (arr[mid] < x)
             start = mid + 1;
        else
             end = mid - 1;
    }

    return false;
}


let arr = [1, 3, 5, 7, 8, 9];
let x = 5;
console.log(iterativeFunction(arr, x) )   ;
```

EXPECTED OUTPUT:
-> if x : 5   output: true

-> if x: 6   output: false

3) Write a JavaScript program to list the properties of a JavaScript object – “five.js”

```
let object = {
    name: 'Jack',
    age: 25,
    college: 'KMIT',
    year: 3,
    sem: 1
  };
let properties = Object.keys(object)
console.log(properties);
```