1.Check if the number 12 is in the array

```
function seqSearch(arr, x) {
for (let i = 0; i < arr.length; i++) {
if (arr[i] == x) {
    return true;
  }
 }
  return false;
}

let arr = [10,22,67,75,80,66];
let x = 12;

seqSearch(arr,x) ? console.log(x + " is in the array.")
    : console.log(x + " is not in the array.");
```

Output

```
PS C:\Users\NIDA\Documents\Dibimbing> node .\sortassigment.js
12 is not in the array.
```

2.Sort array with bubble sort

```
function bblSort(arr) {

    for (let i = 0; i < arr.length; i++) {
      for (let j = 0; j < (arr.length - i - 1); j++) {

        if (arr[j] > arr[j + 1]) {

          let temp = arr[j]
          arr[j] = arr[j + 1]
          arr[j + 1] = temp;
        }
      }
    }

    console.log(arr);
  }


  let arr = [10,22,67,75,80,66];
  bblSort(arr)
```

Output

```
PS C:\Users\NIDA\Documents\Dibimbing\Tugas\Assignment> node .\bblsrt.js
[ 10, 22, 66, 67, 75, 80 ]
```

3.Sort array with selection sort

```
function selectionSort(arr) {
    let n = arr.length;

    for(let i = 0; i < n; i++) {
        let min = i;
        for(let j = i+1; j < n; j++){

            if(arr[j] < arr[min]) {
                min=j;
            }
         }
         if (min != i) {
            let tmp = arr[i];
            arr[i] = arr[min];
            arr[min] = tmp;

        }
    }
    return console.log(arr);
}

let arr = [10,22,67,75,80,66];
selectionSort(arr)
```

Output

```
PS C:\Users\NIDA\Documents\Dibimbing\Tugas\Assignment> node .\selectionSort.js
[ 10, 22, 66, 67, 75, 80 ]
```

4.Sort array with insertion sort

```
function insertionSort(Arr) {
    let n = Arr.length;
    for (let i = 1; i < n; i++) {
        let current = Arr[i];
        let j = i - 1;

        while ((j > -1) && (current < Arr[j])) {
            Arr[j + 1] = Arr[j];
            j--;
        }
        Arr[j + 1] = current;
    }
    return Arr;
}

let Arr = [10,22,67,75,80,66];
insertionSort(Arr);
console.log(Arr);
```

Output

```
PS C:\Users\NIDA\Documents\Dibimbing\Tugas\Assignment> node .\insertionSort.js
[ 10, 22, 66, 67, 75, 80 ]
```