```
// Write an algorithm that removes duplicates from an array. Do not use a function like filter() to solve this. Once you have solved the problem, demonstrate how it can be solved with filter(). Solve the problem with and without recursion.
```

Input = array int or string or both?

Ex inputs
[7, 9, “hi”, 12, “hi”, 7, 53]

Output:
[7, 9, “hi”, 12, 53]

Duplicate def = hi != Hi

CODE
NO REC

```
Function arrDeDup(arr) {
  Const newArr = [];
  For (let i =0; i < arr.length; i++) {
    If (!newArr.includes(arr[i])) {
      newArr.push(arr[i]));
      }
}
Return newArr;
}
```

REC

```
Function remDup(arr) {
If (arr.length === 0) {
   Return [];
}

Const test = arr[0];
Const modArr = arr.slice(1);

If (modArr.includes(tester)) {
Return remDup(modArr);
} else {
Return [tester].concat(remDup(modArr));
}}
```

Ex inputs

[7, 9, “hi”, 12, “hi”, 7, 53]

Output:
[7, 9, “hi”, 12, 53]

```
function remDupFilter(arr) {
 return arr.filter(function (element, index) {
   return arr.indexOf(element) === index;
   //if the index matches the index of the first occurance, it is added to the array
 });
}
```