

1.

a. List Unique Categories in the array

```
let array = [{ product: 'car', category: 'toys', rating: 8 },
{ product: 'legos', category: 'toys', rating: 9 },
{ product: 'iphone', category: 'Mobile', rating: 10 },
{ product: 'samsung', category: 'Mobile', rating: 6 },
{ product: 'sofa', category: 'furniture', rating: 10 }];

let array2 = [{ product: 'Gardening Tools', category: 'tools', rating:
8 },
{ product: 'Power tools', category: 'tools', rating: 10 },
{ product: 'sofa', category: 'Furniture', rating: 8 },
{ product: 'Tables', category: 'Furniture', rating: 7 },
{ product: 'stools', category: 'Furniture', rating: 7 }
]

console.log(listAllCategories(array));//[ 'toys', 'Mobile',
'furniture' ]

console.log(listAllCategories(array2));//[ 'tools', 'Furniture' ]
```

b. Get the Category that has highest ratings.

```
console.log(highestRatedCategory(array)); //furniture

console.log(highestRatedCategory(array2)); //tools
```

2. Implement 'CopyWithin' -dont use built in function 'copyWithin'.

copyWithin() copies array elements to another position in an array, overwriting existing values:

```
const fruits = ["Banana", "Orange", "Apple", "Mango", "Kiwi",'pear'];  
// Copy to index 2, all elements from index 0:  
console.log(copyWithin(fruits,2,0));// [ 'Banana', 'Orange', 'Banana',  
'Orange', 'Apple', 'Mango' ]  
// Copy to index 2, elements from index 0-2:  
console.log(copyWithin(fruits,2,0,2));  
// ['Banana','Orange','Banana','Orange','kiwi','pear']  
// Copy to index 1, elements from index 2-4:  
console.log(copyWithin(fruits,1,2,4));  
// ['Banana','Apple','Mango','Mango','kiwi','pear']
```

3. Find missing Integers in the given array.

(HINT: Find the maximum integer in the array and print all the numbers missing starting from 1 till the max number)

```
console.log(missingInteger([13, 11, 9]));//[1, 2, 3, 4, 5,6, 7, 8, 10, 12 ]  
console.log(missingInteger([3, 6, 4, 9]));//[ 1, 2, 5, 7, 8 ]
```

4. Find triplets in the array whose sum is equal to given sum

```
console.log(findTriplet([1,2,3,4,5,9],9));// [ [ 1, 3, 5 ], [ 2, 3, 4 ] ]
```

Sum of 1+3+5 = 9, Sum of 2+3+4 = 9

```
console.log(findTriplet([1,2,3,4,5,9],10));// [ [ 1, 4, 5 ], [ 2, 3, 5 ] ]
```

```
console.log(findTriplet([1,5,7,2,8,9,3,4],10));// [[ 1, 5, 4 ], [ 1, 7, 2 ], [ 5, 2, 3 ]]
```

```
console.log(findTriplet([1,5,7,2,8,9,3,4],12));// [[ 1, 7, 4 ], [ 1, 2, 9 ], [ 1, 8, 3 ], [ 5, 3, 4 ], [ 7, 2, 3 ]]
```