4.1. DO THE BELOW PROGRAMS IN ANONYMOUS FUNCTION

4.1.1. PRINT ODD NUMBERS IN AN ARRAY

```
let OddNum = function(numbe) {
    let num =[];
    for (let index in numbe ) {
        if( numbe[index] % 2 === 1) {
            num.push(numbe[index]);
        }
    }
    console.log(num)
}
numbers = [8, 3, 7, 9, 4, 28, 99, 73, 805, 88, 62, 55]
OddNum(numbers)
```

```
[Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
[
    3,    7,    9,    99,
    73, 805, 55
]
[Done] exited with code=0 in 0.146 seconds
```

4.1.2 CONVERT ALL THE STRINGS TO TITLE CAPS IN A STRING ARRAY

```
let TitleCaps = function(str){
    for (let index in str){

    if (!str){
        console.log('no input');
    }
    str[index] = str[index].toLowerCase().split(' ');
    str1 = str[index]
    for (let i in str1) {
        str1[i] = str1[i].charAt(0).toUpperCase() + str1[i].slice(1);
        // console.log(str1);
    }
    console.log(str1.join(' '));
  }
}
arr = ['devil', 'ikigai', 'swordsman', 'silent warrier devil']
TitleCaps(arr)
```

```
Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"

Devil
Ikigai
Swordsman
Silent Warrier Devil
```

4.1.3 SUM OF ALL NUMBERS IN AN ARRAY

```
let sum = function(val) {
    total = 0;
    for (let index in val){
        total = total + val[index];
    }
    console.log(total);
}
arr = [2, 4 , 55, 23, 55];
sum(arr)
```

```
[Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
139
```

4.1.4 RETURN ALL THE PRIME NUMBERS IN ARRAY

```
let a = [5, 9, 63, 29, 35, 6, 55, 23]
let prime = [];

let isPrime = function (item) {
    let identifier = item / 2;
     for (let j = 2; j <= identifier; j++) {
        if ((item % j) == 0) {
            return false;
        }
        }
        return true;
}

for (let index = 0; index < a.length; index++) {
    if (isPrime(a[index])) {
        prime.push(a[index])
    }
}
console.log(prime);</pre>
```

```
Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
[ 5, 29, 23 ]
```

4.1.5 RETURN ALL THE PALINDROMES IN AN ARRAY

```
let isPalindrome = function(el) {
   const str = String(el);
   let i = 0;
   let j = str.length - 1;
   while(i < j) {</pre>
      if(str[i] === str[j]) {
         i++;
         j--;
      else {
         return false;
   return true;
};
let findPalindrome = function(arr) {
   return arr.filter(el => isPalindrome(el));
let arr = ['carecar', 1344, 12321, 'did', 'cannot'];
console.log(findPalindrome(arr));
```

```
[Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
[ 12321, 'did' ]
```

4.1.6 RETURN MEDIAN OF TWO SORTED ARRAY OF SAME SIZE

```
let SortedArray = function (num1, num2) {
    let compare = function(i, j){
        return i - j;
    }
    let arr = num1.concat(num2).sort(compare);
    if (arr.length % 2 == 0){
        return arr1 = (arr[arr.length/2 - 1] + arr[arr.length/2])/2
    }
}
val1 = [2, 4, 6];
val2 = [8, 9, 7];
SortedArray(val1, val2)
console.log(arr1)
```

```
[Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
6.5
```

4.1.7 REMOVE DUPLICATES FROM AN ARRAY

```
[Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
[ 1, 'mango', 'apple', 'orange' ]
```

4.1.8 ROTATE AN ARRAY BY K-TIMES

```
let RightRotate = function (a, n, k)
{
    let var1 = [];
    for (let i = 0; i < n; i++) {
        if (i < k) {
            var1.push(a[n + i - k] + " ")
        }
        else {
            var1.push(((a[i - k]) + " "));
        }
    }
    console.log(var1.slice().join(' '));
}

let Array = [1, 2, 3, 4, 5];
let N = Array.length;
let K = 3;

RightRotate(Array, N, K);</pre>
```

```
Running] node "c:\Users\vicky\OneDrive\Desktop\zen\EXAMPLE.JS"
3  4  5  1  2
```