Print odd numbers in an array (Anonymous function):

```
let oddNumbers = function(number) {
   for (let i = 0; i < number.length; i++) {
      if (number[i] % 2 !== 0) {
         console.log(number[i]);
      }
   }
};
```

Print odd numbers in an array (IIFE function):

```
(function(number) {
   for (let i = 0; i < number.length; i++) {
      if (number[i] % 2 !== 0) {
         console.log(number[i]);
      }}
})([1,2,3,4,5,6,7,8]);
```

Print odd numbers in an array (arrow function):

```
const oddNumbers = (number) => {
   for (let i = 0; i < number.length; i++) {
      if (number[i] % 2 !== 0) {
         console.log(number[i]);
      }
   }
};

const number = [1, 2, 3, 4, 5, 6, 7, 8];
oddNumbers(number);
```

Convert all the strings to title caps in a string array(anonymous function)

```
const strings = ["hello world", "hello computer", "good morning"];
let final = []

strings.forEach(function(str){
   let Eachstr =''
   let SplitTheWords = str.split(" ")
   for (let i=0; i<SplitTheWords.length; i++){
      Eachstr += SplitTheWords[i].charAt(0).toUpperCase() +
SplitTheWords[i].slice(1).toLowerCase() + ' '
   }
   console.log(Eachstr)
   final.push(Eachstr.trim());

})


console.log(final)
```

Convert all the strings to title caps in a string array(IIFE function)

```
const strings = ["hello world", "hello computer", "good morning"];
let final = []

(function (){
   strings.forEach(function(str){
   let Eachstr =''
   let SplitTheWords = str.split(" ")
   for (let i=0; i<SplitTheWords.length; i++){
      Eachstr += SplitTheWords[i].charAt(0).toUpperCase() +
SplitTheWords[i].slice(1).toLowerCase() + ' '
   }
   final.push(Eachstr.trim());

})

})();
console.log(final)
```

Sum of all numbers in an array (anonymous function):

```
nubmers = [1,2,3,4,5,6,7,8,9,10]


const sum = function(arr) {
    let total = 0;
    arr.forEach(function(num) {
        total += num;
    });
    return total;
};


console.log(sum(numbers));
```

Sum of all numbers in an array (IIFE function):

```
const numbers = [1, 2, 3, 4, 5];


const total = (function(arr) {
    let sum = 0;
    for (let i = 0; i < arr.length; i++) {
        sum += arr[i];
    }
    return sum;
})(numbers);


console.log(total);
```

Sum of all numbers in an array (arrow function):

```
const numbers = [1, 2, 3, 4, 5];

const total = (() => {
  let sum = 0;
  for (let i = 0; i < numbers.length; i++) {
    sum += numbers[i];
  }
  return sum;
})();

console.log(total);
```

Return all the prime numbers in an array(anonymous function):

```
const numbers = [2, 3, 4, 5, 6, 7, 8, 9, 10];

const primeNumbers = function(arr) {
  const isPrime = function(num) {
    if (num <= 1) {
      return false;
    }
    for (let i = 2; i <= Math.sqrt(num); i++) {
      if (num % i === 0) {
        return false;
      }
    }
    return true;
  };

  const result = [];
  for (let i = 0; i < arr.length; i++) {
    if (isPrime(arr[i])) {
      result.push(arr[i]);
    }
  }
  return result;
};

console.log(primeNumbers(numbers));
```

Return all the prime numbers in an array(IIFE function):

```
const numbers = [2, 3, 4, 5, 6, 7, 8, 9, 10];

const primeNumbers = (() => {
```

```
    const isPrime = (num) => {
        if (num <= 1) {
            return false;
        }
        for (let i = 2; i <= Math.sqrt(num); i++) {
            if (num % i === 0) {
                return false;
            }
        }
        return true;
    };

    return (arr) => {
        const result = [];
        for (let i = 0; i < arr.length; i++) {
            if (isPrime(arr[i])) {
                result.push(arr[i]);
            }
        }
        return result;
    };
})();

console.log(primeNumbers(numbers));
```

Return all the prime numbers in an array(arrow function):

```
const numbers = [2, 3, 4, 5, 6, 7, 8, 9, 10];

const primeNumbers = (() => {
    const isPrime = (num) => {
        if (num <= 1) {
            return false;
        }
        for (let i = 2; i <= Math.sqrt(num); i++) {
            if (num % i === 0) {
                return false;
            }
        }
        return true;
    };

    return (arr) => {
        const result = [];
        arr.forEach((num) => {
            if (isPrime(num)) {
                result.push(num);
            }
        });
        return result;
```

```
    };
})();

console.log(primeNumbers(numbers));
```

Return all the palindromes in an array (Anonymous function):

```
let palindromes = function(arr) {
    let result = [];
    arr.forEach(function(str) {
        if (str === str.split('').reverse().join('')) {
            result.push(str);
        }
    });
    return result;
};
```

Return all the palindromes in an array (IIFE function):

```
Array = [civic, Noon]

let palindromes = (function(arr) {
    let result = [];
    arr.forEach(function(str) {
        if (str === str.split('').reverse().join('')) {
            result.push(str);
        }
    });
    return result;
})(array);
```

Return all the palindromes in an array (arrow function):

```
let palindromes = (arr) => {
    let result = [];
    arr.forEach((str) => {
        if (str === str.split('').reverse().join('')) {
            result.push(str);
        }
    });
    return result;
};
```

Remove duplicates from an array (anonymous function)

```
let uniqueArray = function(arr) {
    let result = [];
    arr.forEach(function(item) {
        if (result.indexOf(item) === -1) {
            result.push(item);
        }
    });
    return result;
```

Remove duplicates from an array (IIFE function)

```
let uniqueArray = (function(arr) {
    let result = [];
    arr.forEach(function(item) {
        if (result.indexOf(item) === -1) {
            result.push(item);
        }
    });
    return result;
})(array);
```

Rotate an array by k times(Anonymous function)

```
let array = [1, 2, 3, 4, 5];
let k = 3;

let rotateArray = function(arr, k) {
   for (let i = 0; i < k; i++) {
      let temp = arr.pop();
      arr.unshift(temp);
   }
   return arr;
};
```

Rotate an array by k times(IIFE function)

```
let array = [1, 2, 3, 4, 5];
let k = 3;

let rotatedArray = (function(arr, k) {
   for (let i = 0; i < k; i++) {
      let temp = arr.pop();
      arr.unshift(temp);
   }
   return arr;
})(array.slice(), k);
```