1. Write a program that checks if a given element e is in the array a.
   Input: e = 3, a = [5, -4.2, 3, 7]
   Output: yes

   Input: e = 3, a = [5, -4.2, 18, 7]
   Output: no

```
function doesElementExist(array, elementToMatch) {
    if (array.length < 1 || !elementToMatch) {
        return false;
    }
    for (var i = 0; i < array.length; i++) {
        var element = array[i];
        if (elementToMatch === element) {
            return true;
        }
    }
    return false;
}

var element = 3;
var array = [5, -4.2, 3, 7];
var isMatch = doesElementExist(array, element);

console.log(isMatch ? "yes" : "no");
```

2. Write a program that multiplies every positive element of a given array by 2.
   Input array: [-3, 11, 5, 3.4, -8]
   Output array: [-3, 22, 10, 6.8, -8]

```
function doublePositiveArrayValues(inputArray) {
    if (inputArray.length < 1) {
        return inputArray;
    }

    var doubledArray = [];

    for (var i = 0; i < inputArray.length; i++) {
        var arrayElement = inputArray[i]
        if (arrayElement > 0) {
            var doubleElement = arrayElement * 2;
            doubledArray[i] = doubleElement;
        } else {
            doubledArray[i] = arrayElement;
        }
    }

    return doubledArray;
}

var array = [-3, 11, 5, 3.4, -8];
var doubledArray = doublePositiveArrayValues(array);

console.log(doubledArray);
```

3. Write a program that finds the minimum of a given array and prints out its value and index.
   Input array: [4, 2, 2, -1, 6]
   Output: -1, 4

```
function findMinimum(inputArray) {
    if (inputArray.length < 1) {
        return inputArray;
    }

    var minElement = [];
    var minElementValue = 9007199254740991;
    var minElementIndex = 0;

    for (var i = 0; i < inputArray.length; i++) {
        var element = inputArray[i]
        if (minElementValue > element) {
            minElementValue = element;
            minElementIndex = i;
        }
    }

    minElement = [minElementValue, minElementIndex];

    return minElement;
}

var array = [4, 2, 2, -1, 6];
var minElement = findMinimum(array);

console.log(minElement);
```

4. Write a program that finds the first element larger than minimum and prints out its value.
   Input array: [4, 2, 2, -1, 6]
   Output: 2

```
function findFirstLargerElement(inputArray) {
    if (inputArray.length < 1) {
        return inputArray;
    }

    var minElement = 9007199254740991;
    var firstLargerElement = 0;

    for (var i = 0; i < inputArray.length; i++) {
        var element = inputArray[i];
        if (element < minElement) {
            firstLargerElement = minElement;
            minElement = element;
        }
    }

    return firstLargerElement;
}

var array = [4, 2, 2, -1, 6];
var firstLargerElement = findFirstLargerElement(array);

console.log(firstLargerElement);
```

5. Write a program that calculates the sum of positive elements in the array.
   Input array: [3, 11, -5, -3, 2]
   Output: 16

```
function sumPositiveNumbers(array) {
    if (array.length < 1) {
        return array;
    }

    var sum = 0;

    for (var i = 0; i < array.length; i++) {
        var element = array[i];
        if (element > 0) {
            sum += element;
        }
    }

    return sum;
}

var array = [3, 11, -5, -3, 2];
var sum = sumPositiveNumbers(array);

console.log(sum);
```

6. Write a program that checks if a given array is symmetric. An array is symmetric if it can be read the same way both from the left and the right hand side.
   Input array: [2, 4, -2, 7, -2, 4, 2]
   Output: The array is symmetric.

   Input array: [3, 4, 12, 8]
   Output: The array isn't symmetric.

```
function isArraySymmetric(array) {
    if (array.length < 1) {
        return false;
    }

    for (var i = 0; i < array.length / 2; i++) {
        var element = array[i];
        var elementPair = array[array.length - i - 1]
        if (element !== elementPair) {
            return false;
        }
    }
    return true;
}

var array = [2, 4, -2, 7, -2, 4, 2];
var isSymmetric = isArraySymmetric(array);

console.log(isSymmetric ? "The array is symmetric." : "The array isn't
symmetric.");
```

7. Write a program that intertwines two arrays. You can assume the arrays are of the same length.
   Input arrays: [4, 5, 6, 2], [3, 8, 11, 9]
   Output array: [4, 3, 5, 8, 6, 11, 2, 9]

```
function twistArrays(firstArray, secondArray) {
   var combinedArray = [];
   var arraysLength = firstArray.length + secondArray.length;

   for (var i = 0, j = 0; j < arraysLength; i++) {
       if (i < firstArray.length) {
           combinedArray[j++] = firstArray[i];
       }

       if (i < secondArray.length) {
           combinedArray[j++] = secondArray[i];
       }
   }

   return combinedArray;
}

var firstArray = [4, 5, 6, 2];
var secondArray = [3, 8, 11, 9];
var twistedArray = twistArrays(firstArray, secondArray);

console.log(twistedArray);
```

8. Write a program that concatenates two arrays.
   Input arrays: [4, 5, 6, 2], [3, 8, 11, 9]
   Output array: [4, 5, 6, 2, 3, 8, 11, 9]

```
function concatArrays(firstArray, secondArray) {
   var concatenatedArray = [];

   for (var i = 0; i < firstArray.length; i++) {
       concatenatedArray[i] = firstArray[i];
       for (var j = 0; j < secondArray.length; j++) {
           concatenatedArray[firstArray.length + j] =
secondArray[j];
       }
   }
   return concatenatedArray;
}

var firstArray = [4, 5, 6, 2];
var secondArray = [3, 8, 11, 9];
var concated = concatArrays(firstArray, secondArray);

console.log(concated);
```

9. Write a program that deletes a given element e from the array a.
   Input: e = 2, a = [4, 6, 2, 8, 2, 2]
   Output array: [4, 6, 8]

```
function deleteElement(array, elementToDelete) {
    if (array.length < 1 || !elementToDelete) {
        return array;
    }

    var newArray = [];

    for (var i = 0, j = 0; i < array.length; i++) {
        if (elementToDelete === array[i]) {
            delete array[i];
        }

        if (typeof array[i] === "number") {
            newArray[j] = array[i];
            j++;
        }
    }
    return newArray;
}

var array = [4, 6, 2, 8, 2, 2];
var element = 2;

console.log(array);
array = deleteElement(array, element);
console.log(array);
```

10. Write a program that inserts a given element e on the given position p in the array a. If the value of the position is greater than the array length, print the error message.
    Input: e = 78, p = 3, a = [2, -2, 33, 12, 5, 8]
    Output: [2, -2, 33, 78, 12, 5, 8]

```
function insertElement(array, element, position) {
    position = position || 0;
    if (array.length < 1 || !element) {
        return array;
    }

    if (position => array.length) {
        console.log("Index out of bounds.");
        return array;
    }

    var newArray = [];
    for (var i = 0, j = 0; i < array.length; i++) {
        if (i === position) {
            newArray[j] = element;
            newArray[j + 1] = array[i];
            j += 2;
        } else {
            newArray[j] = array[i];
            j++;
        }
    }
    return newArray;
}

var element = 78;
var position = 3;
var array = [2, -2, 33, 12, 5, 8];
var output = insertElement(array, element, position);

console.log(output);
```