Submitted By: M. Talha Atif   F2021266573
Quiz 3 as assignment

1. Code:

```html
<!-- Name: M.Talha Atif -->
 <!-- ID: F2021266573 -->
<!DOCTYPE html>
<html lang="en">
<head>
    <title>talha atif quiz number 3</title>
    <style>
        button{
            background-color: #9be0c7;
            border-radius: 10px solid yellow;
            border-top-right-radius: 10px;

            margin: 40px;
            padding: 20px;
        }
    </style>
</head>
<!--  my body of dom document  (dom is my heirarchy of elements given through
tags , root is html then so on child nodes are body and head) -->
<body>
    <!-- Button for checking number given is odd or even -->
    <button onclick="checkEvenOdd()"> Even-Odd</button>
    <!-- This div will be used to display result for even and odd number -->
    <div id="resultEvenOdd">  </div>

    <!-- Button for printing array in reverse order -->
    <button onclick="reverseArray([1,2,3,4,'talha atif','checking test post
get'])"> Reverse the array </button>
    <!-- This div will be used to display result for reverse of array -->
    <div id="reverseArray"> </div>


    <!-- Button for getting index of element in array-->
    <button onclick="useGetIndex()"> Get element index </button>
    <!-- This div will be used to display result for displaying index of
fetched element  -->
    <div id="getIndex"> </div>


     <!-- Button for getting index of element in array-->
     <button onclick="takeColor()"> Set Background Color </button>
```

```html
    <!-- This div will be used to display result for displaying index of
fetched element  -->
    <div id="takeColor"> </div>



    <!-- Javascript code is here below -->
    <script>
    //  This function will check number taken from windows prompt
    // Using if number will be divided by 2, if remainder is zero than result
is even
    // Else result will be odd
    // 2%2 == 0 is so it is even
    // 3%2 == 2 so it is odd
        function checkEvenOdd(){
            //  taking input
            let number = parseInt(  prompt('Enter a number: '))
            // checking using if condition
            // even case
            if (number%2==0){
                document.getElementById("resultEvenOdd").innerHTML=  "Hey!,
you entered " + number + " -> is even (:"
            }
            // odd case
            else{
                document.getElementById("resultEvenOdd").innerHTML=  "Hey!,
you entered " + number + " -> is odd ):"
            }
        }


        // Question 2
        // function to print elements in reverse order of the array

        function reverseArray(myArray){
            //  this line will add string in div reverse array
            document.getElementById("reverseArray").innerHTML = "Hey Reverse
of your given array: -> "
            // iterate from end of array index and then go upward towards 0
like array size is 5, then 4 to 0 by
            // decrementing --, -- here is postfix operator with --
            for( i = myArray.length-1; i>=0 ; i--){
                console.log( myArray[i])
                // using ' ', we added space and using += we concatenated so
that previous element not lost
                document.getElementById("reverseArray").innerHTML
+=  myArray[i] + ' '
            }
        }
```

```javascript
// Question 3

// function that takes number as input and give index, for doing that
we can pass array as well
// to function or may be we can create inside function
function getIndex(myArray, element){
    //  this line will add string in div reverse array

    // iterate from starting index 0 to end index that is length of
array - 1
    index = -1
    for( i = 0; i < myArray.length - 1 ; i++){
        if (element == myArray[i]){
         index = i
         break; // here breaking because may be there are duplicate
values in our array being passed
        }

    } // end of for loop

    return index // it will give -1 if element is not in array
}

// Use above function to get index of array

function useGetIndex(){
    myArray = new Array(10)
    // hard code assignment
    myArray[0] = 'talha'
    myArray[1] = 'how are you'
    myArray[2] = 'how are you too'
    myArray[3] = 4
    // 30,31,32,33,34,35,36 will be values stored using below loop
(assigning using loop)
    // i've used m as index for iteration and i as value for
assignment
    m = 0
    for (i = 30, m=4; i <37; i++,m++){
        myArray[m] = i
    }
    console.log(myArray)
    let element = prompt('Hey enter element to find: ')

    // get index of element
    let obtainedIndex = getIndex(myArray, element)

    if( obtainedIndex  != -1){ // -1 means that element is not there,
and not -1 mean element is there
```

```
            document.getElementById("getIndex").innerHTML = "Hey Index for
given element " + element + "is : -> " + obtainedIndex
            }
            else{

                document.getElementById("getIndex").innerHTML = 'OOps! your
element is not in that array'
            }

        }

        // Question 4
        // Taking color from user or setting it as bacground color


        function takeColor(){
            color =  prompt('Hey! please enter a color or you can type hex code
without hash sign (should be 6 letters for hex code)')
            if (color.length <=1 ){
                document.getElementById("takeColor").innerHTML = 'Color Length
should be greater than 1 for giving hex code or name'
            }
            hexCode = false
            for( i=0; i< color.length -1 ; i++){
                if (color[i]>='0' && color[i]<='9'){
                    hexCode = true
                }
            }
            if(hexCode){ // by hexa code
                document.body.style.backgroundColor = '#' + color
                document.getElementById("takeColor").innerHTML = 'Color given
using hexacode: -> #' + color
            }
            else{ // by name
                document.body.style.backgroundColor = color
                document.getElementById("takeColor").innerHTML = 'Color given
using name: -> ' + color
            }


        }


        // end of script tag
    </script>

    <!-- End of html body tag -->
</body>
```
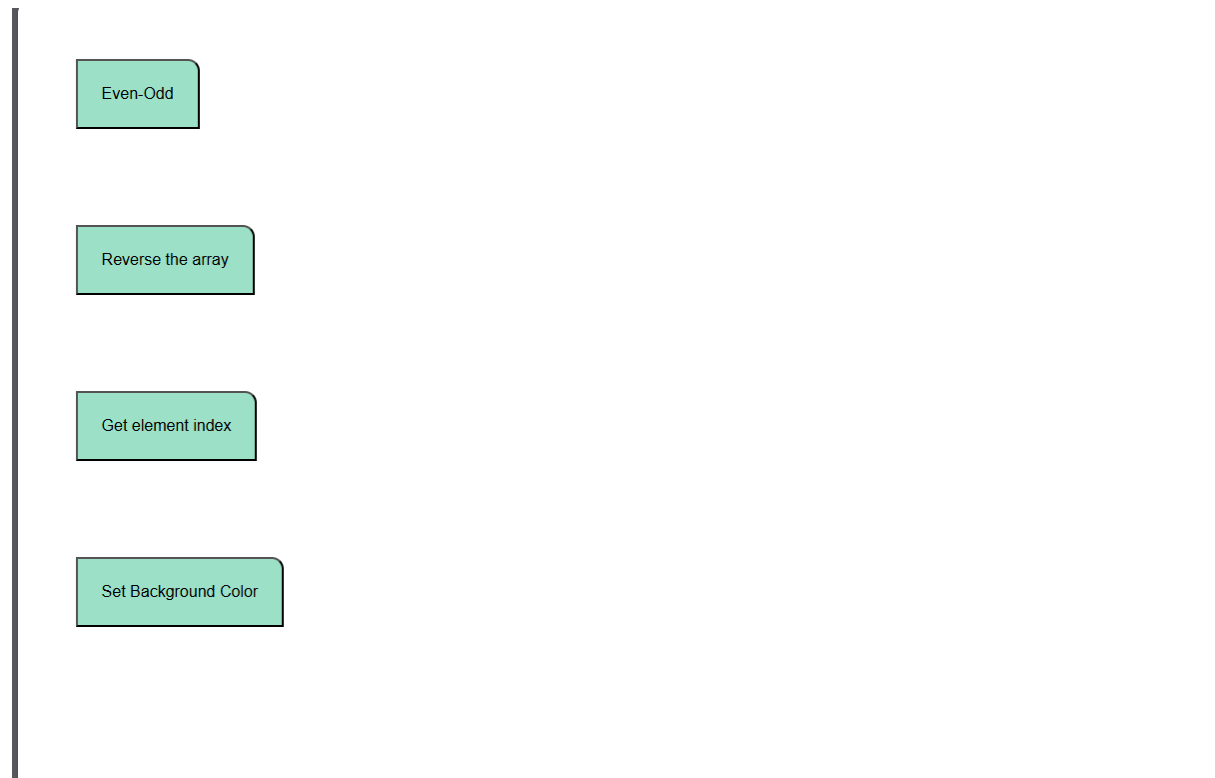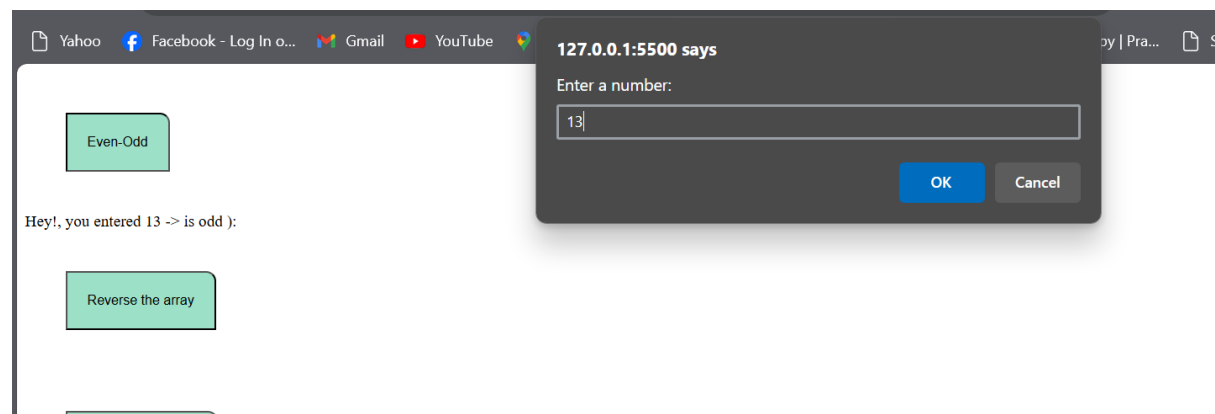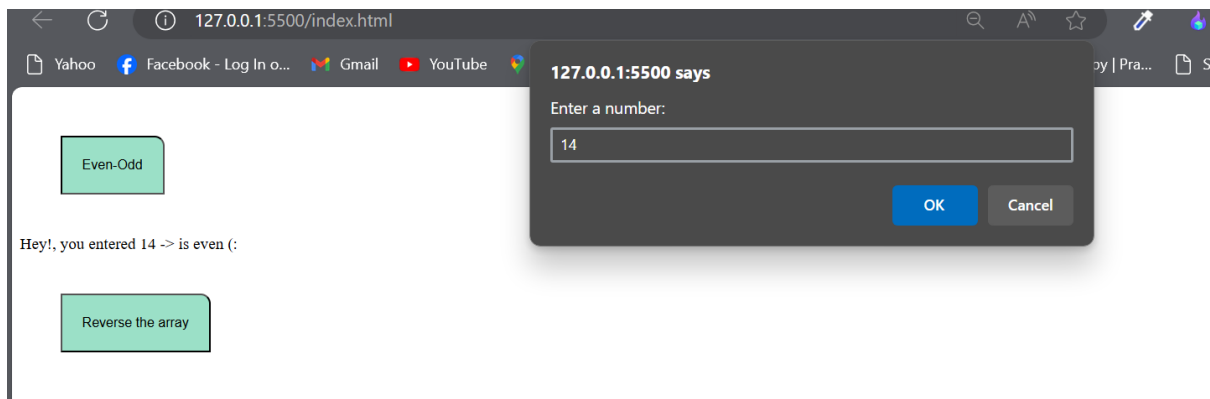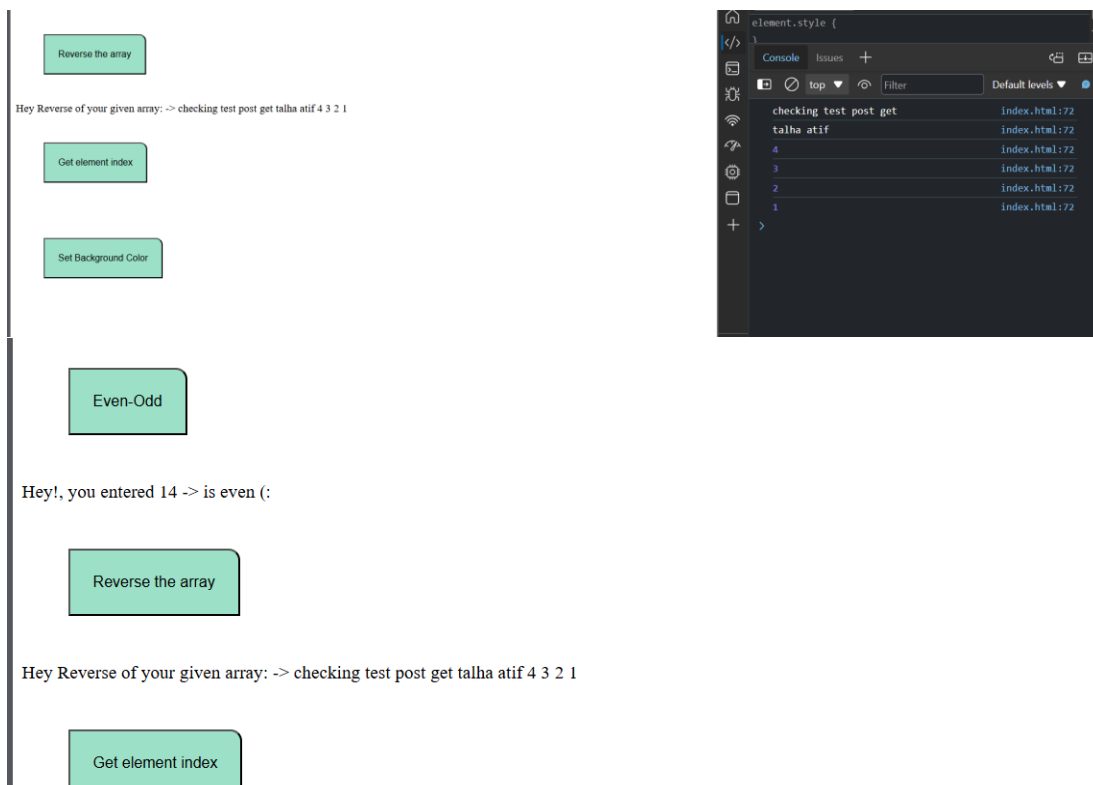
```
</html>
```

2. Output:

2.1   Initial Page

Even-Odd

Reverse the array

Get element index

Set Background Color

2.2   Even Odd function working

Yahoo   Facebook - Log In o...   Gmail   YouTube   ...   py | Pra...

127.0.0.1:5500 says

Enter a number:

13

OK   Cancel

Even-Odd

Hey!, you entered 13 -> is odd):

Reverse the array

2.3 Reverse Array function working

```
<!-- Button for printing array in reverse order -->
<button onclick="reverseArray([1,2,3,4,'talha atif','checking test post get'])"> Re
```


Hey Reverse of your given array: -> checking test post get talha atif 4 3 2 1

Hey!, you entered 14 -> is even (:

Hey Reverse of your given array: -> checking test post get talha atif 4 3 2 1

2.4 Element Index Function working

```
function usedetindex(){
    myArray = new Array(10)
    // hard code assignment
    myArray[0] = 'talha'
    myArray[1] = 'how are you'
    myArray[2] = 'how are you too'
    myArray[3] = 4
    // 30,31,32,33,34,35,36 will be values stored
    // i've used m as index for iteration and i as
    m = 0
    for (i = 30, m=4; i <37; i++,m++){
        myArray[m] = i
    }
```
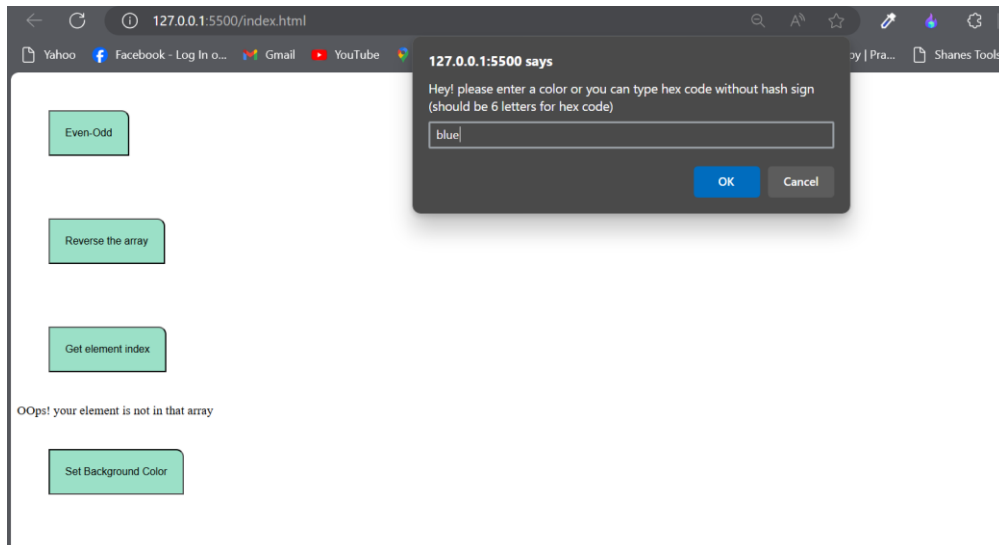
Even-Odd

Reverse the array

Get element index

Hey Index for given element 34 is : -> 8
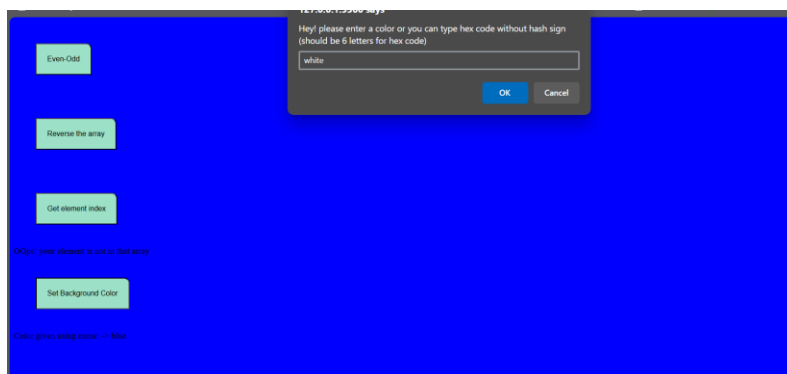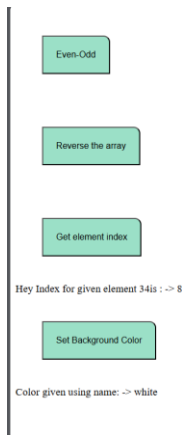
Set Background Color

34 is given as element and its index returned to me is 8.
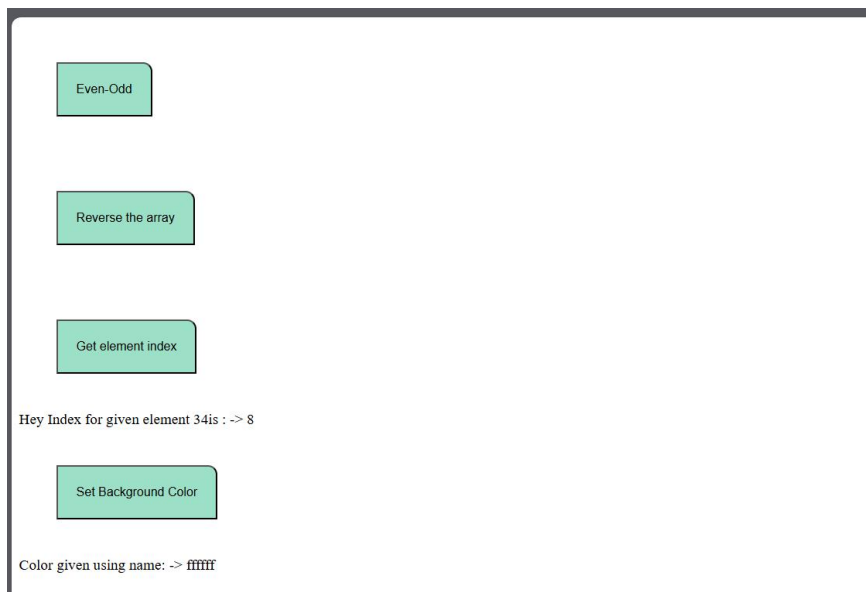
2.5 Function Set Background Color working

Now again setting white color,

Even-Odd

Reverse the array

Get element index

Hey Index for given element 34is : -> 8

Set Background Color

Color given using name: -> white

Using hex code:

Even-Odd

Reverse the array

Get element index

Hey Index for given element 34is : -> 8

Set Background Color

Color given using name: -> white

127.0.0.1:5500 says
Hey! please enter a color or you can type hex code without hash sign
(should be 6 letters for hex code)

ffffff

OK   Cancel

Even-Odd

Reverse the array

Get element index

Hey Index for given element 34is : -> 8

Set Background Color

Color given using name: -> ffffff

3b3b3b as input

Even-Odd

Reverse the array

Get element index

Hey Index for given element 34is : -> 8

Set Background Color

Color given using name: -> ffffff

Even-Odd

Reverse the array

Get element index

Hey Index for given element 34is : -> 8

Set Background Color

Color given using hexacode: -> #3b3b3b