Question.1

function fizzBuzz(n) {

    let result = [];

    for (let i = 1; i <= n; ++i) {

        if (i % 3 === 0 && i % 5 === 0) {

            result.push("FizzBuzz");

        }

        else if (i % 3 === 0) {

            result.push("Fizz");

        }

        else if (i % 5 === 0) {

            result.push("Buzz");

        }

        else {

            result.push(i.toString());

        }

    }

    return result;

}

let n = 25;

let result = fizzBuzz(n);

console.log(result.join(' '));

Output:

1 2 Fizz 4 Buzz Fizz 7 8 Fizz Buzz 11 Fizz 13 14 FizzBuzz 16 17 Fizz 19 Buzz Fizz 22 23 Fizz Buzz

Question.2

function isOperand(c)

{

    return (c.charCodeAt(0) >= '0'.charCodeAt(0) && c.charCodeAt(0) <= '9'.charCodeAt(0));

}

function value(c)

{

    return (c.charCodeAt(0) - '0'.charCodeAt(0));

}

function evaluate(exp)

{

    if (exp.length == 0) return -1;

    let res = value(exp[0]);

    for (let i = 1; i<exp.length; i += 2)

    {

        let opr = exp[i], opd = exp[i+1];

        if (isOperand(opd) == false) return -1;

        if (opr == '+') res += value(opd);

        else if (opr == '-') res -= value(opd);

        else if (opr == '\*') res \*= value(opd);

        else if (opr == '/') res /= value(opd);

        else return -1;

    }

    return res;

}

let exp1= "1+2+5\*4-6"

console.log(evaluate(exp1))

Output:

26

Question.3

var flatten = function(a, r) {

    if (!r) {

        r = [];

    }

    for (var i = 0; i < a.length; i++) {

        if (a[i].constructor == Array) {

            flatten(a[i],r);

        } else {

            r.push(a[i]);

        }

    }

    return r;

}

console.log(flatten([1, [2], [3, [[4]]], [6, 9]]));

Output:

[ 1, 2, 3, 4, 6, 9 ]

Question.4

    function areAnagram(str1,str2)

    {

        let n1 = str1.length;

        let n2 = str2.length;

        if (n1 != n2)

            return false;

        str1.sort();

        str2.sort()

        for (let i = 0; i < n1; i++)

            if (str1[i] != str2[i])

                return false;

        return true;

    }

    let str1=['g', 'r', 'a', 'm' ];

    let str2=['a', 'r', 'm' ];

        if (areAnagram(str1, str2))

            console.log("The two strings are"

                            + " anagram of each other");

        else

            console.log("The two strings are not"

                            + " anagram of each other");

Output:

The two strings are not anagram of each other

Question.5

let arr = ["scale", "happy", "strength", "peace", "happy", "happy"];

function removeDuplicates(arr) {

    return arr.filter((item, index) => arr.indexOf(item) === index);

}

let uniqueArr = removeDuplicates(arr);

console.log(uniqueArr);

Output:

[ 'scale', 'happy', 'strength', 'peace' ]

Question.6

function capital\_letter(str)

{

    str = str.split(" ");

    for (var i = 0, x = str.length; i < x; i++) {

        str[i] = str[i][0].toUpperCase() + str[i].substr(1);

    }

    return str.join(" ");

}

console.log(capital\_letter("Write a JavaScript program to capitalize the first letter of each word of a given string."));

Output:

Write A JavaScript Program To Capitalize The First Letter Of Each Word Of A Given String.

Question.7

        function fibonacci\_numbers(n) {

            if (n == 0) {

                return 0;

            }

            else if (n == 1) {

                return 1;

            }

            else {

                return fibonacci\_numbers(n - 2) + fibonacci\_numbers(n - 1);

            }

        }

        let n = 7;

        for (let i = 0; i < n; i++) {

            console.log(fibonacci\_numbers(i));

        }

Output:

0

1

1

2

3

5

8

Question.9

var arr1 = [-200, -163, -26, -4, 0, 7, 76];

var evens = arr1.filter(function(x) {

  if (x % 2 === 0 || x === 0) {

    return x;

  }

})

console.log(evens);

[ -200, -26, -4, 76 ]

Question.10

Same as question 6