Question1 : Answer The Following Questions

1-The unshift() method adds new elements to **the beginning** of an array,

2-

let x = 10, y = 5;

x = x + y;

y = x - y;

x = x - y;

document.write("After Swapping: x =" + x + ", y=" + y);

3-

  const str = 'GFG';

  const iterator = str[Symbol.iterator]();

  let theChar = iterator.next();

**for**(let i = 0; i < str.length ;i++) {

    console.log(theChar.value , theChar.done);

    theChar = iterator.next();

  }

Question2: What Is the Output?

1-String

2- 42

11

36

17

3- hello world

10

4- 0

False

11

5- i is not defined

6- undefined

object

(11) [empty × 5, 5, 0, 1, 2, 3, 4]

['apple']

7- undefined

8- fiat

undefined

kia

undefined

volvo

undefined

mercedes

undefined

fiat

0

kia

1

volvo

2

mercedes

3

Question 3 : Write Java Script Code To Solve These Problems

1-

function insertObject(arr, obj) {

    arr.push(obj);

    console.log(arr);

}

let array = [1, 2, 3];

let object = { x: 12, y: 8 };

insertObject(array, object);

2-

var obj = {

    a: "hello",

    b: "this is",

    c: "javascript!",

};

var array = Object.keys(obj)

    .map(function (key) {

        return obj[key];

    });

console.log(array);

3- HTML CODE

<!DOCTYPE html>

<html>

<head>

    <meta charset=utf-8 />

    <title>JavaScript program to calculate multiplication and division of two numbers </title>

    <style type="text/css">

        body {

            margin: 30px;

        }

    </style>

</head>

<body>

    <form>

        1st Number : <input type="text" id="firstNumber" /><br>

        2nd Number: <input type="text" id="secondNumber" /><br>

        <input type="button" onClick="multiplyBy()" Value="Multiply" />

        <input type="button" onClick="divideBy()" Value="Divide" />

    </form>

    <p>The Result is : <br>

        <span id="result"></span>

    </p>

    <script src="java.js"></script>

</body>

</html>

JavaScript Code:

function multiplyBy() {

    num1 = document.getElementById("firstNumber").value;

    num2 = document.getElementById("secondNumber").value;

    document.getElementById("result").innerHTML = num1 \* num2;

}

function divideBy() {

    num1 = document.getElementById("firstNumber").value;

    num2 = document.getElementById("secondNumber").value;

    document.getElementById("result").innerHTML = num1 / num2;

}

4-

const arr = [10, 5, 0, 15, 30];

const min = Math.min(...arr);

const index = arr.indexOf(min);

console.log(index);

5-

 function factorial(x) {

    // if number is 0

    if (x == 0) {

        return 1;

    }

     else {

        return x \* factorial(x - 1);

    }

}

 const num = prompt('Enter a positive number: ');

 if (num >= 0) {

    const result = factorial(num);

    console.log(`The factorial of ${num} is ${result}`);

}

else {

    console.log('Enter a positive number.');}