Let, var,const variable , Function Definition & Calling, Different Ways of displaying output, Arithmetic Operations, Switch case, Using Prompt – Getting the input from the user

```html
<!DOCTYPE html>
<html>
    <head>
        <script>
            function add(a,b)
            {
                document.write(a+b)
            }
            function sub(a,b)
            {
                alert(a-b)
            }
            function product(a,b)
            {
                console.log("The Product of a and b is:"+(a*b))
            }
            function divi(a,b)
            {
                document.getElementById("para").innerHTML = "<h1>Quotient
is</h1>"+parseFloat(a/b)
            }

            function calc()
            {
                let a=parseInt(prompt("Enter the value of a"))
            let b=parseInt(prompt("Enter the value of b"))

                let ch=parseInt(prompt("Enter the operation you want to
perform\n1.Add\n2.Subtract\n3.Product\n4.Division"))
                switch(ch)
                {
                    case 1:add(a,b)//calling the add function
                        break;
                    case 2:sub(a,b)
                        break;
                    case 3:product(a,b)
                        break;
                    case 4:divi(a,b)
                        break
                    default:alert("Enter the correct choice")
                        break;
                }

            }
```

```
        /*      var a=200//global scope
            function cal()
            {
                let ab=50//local scope
                document.write(a+ab)
            }
            cal()
            document.write(a)*/
         </script>

    </head>
    <body>

        <p id="para">Mathematical Operations</p>

        <button type="button" onclick="calc()">Calculate</button>



    </body>
</html>
```

Assigning Values from form textbox, Relational and Logical Operations

```
<!DOCTYPE html>
<html>
    <head>
      <script src="calc.js"></script>
    </head>
    <body>
        <h1>Student Grading System</h1>
        <form>
            <label for="studname">StudentName</label>
            <input type="text" id="studname">

            <label for="m1">Mark 1</label>
            <input type="text" id="m1">

            <label for="m2">Mark 2</label>
            <input type="text" id="m2">

            <label for="tot">Total</label>
            <input type="text" id="tot">
```

```html
            <label for="avg">Average</label>
            <input type="text" id="avg">
            <button type="button" onclick="CalcGrade()">FindGrade</button>
        </form>
    </body>
</html>
```

```javascript
function CalcGrade()
{
    let m1 =parseInt(document.getElementById("m1").value)
    let m2 = parseInt(document.getElementById("m2").value)

    let tot = m1+m2

    document.getElementById("tot").value = tot

    let avg = tot/2

    document.getElementById("avg").value = avg

    if(avg<50)
    {
        alert("Better Luck Next Time")
    }
    else if((avg>50)&&(avg<60))
    {
        alert("Your Grade is D")
    }
    else if((avg>60)&&(avg<70))
    {
        alert("Your Grade is C")
    }
    else if((avg>70)&&(avg<80))
    {
        alert("Your Grade is B")
    }
    else if((avg>80)&&(avg<90))
    {
        alert("Your Grade is A")
    }
    else
    {
        alert("Your Grade is O - Outstanding")
    }

}
```

Using For loops, for..in, for..of, Using object type, Array type, Array methods and String Methods

```html
<!DOCTYPE html>
<html>
    <head>

    </head>
    <body>
        <script>
            let employee={empid:111,empname:"Sridhar",dept:"HR",Salary:80000}

            console.log(employee.empid+" "+employee.empname+" "+employee.dept)

            document.write(employee.empid)

            for(let emp in employee)
            {
                document.write(employee[emp]+"<br>")
            }

            let arr=["HTML","CSS","JS"]
            arr.push("Bootstrap")
            arr.unshift("WT")

            for(let i=0;i<arr.length;i++)
            {
                document.write(arr[i])
            }


            for(let ar of arr)
            {
             document.write(ar+"<br>")
            }
            arr.pop()
            for(let ar in arr)
            {
             document.write(arr[ar])
            }

            let str="Hi everyone kindly dont sleep"

            document.write(str.toUpperCase()+"<br>")
            document.write(str.toLowerCase()+"<br>")

            let str1 = "GoodNoon"
```

```html
        document.write(str.concat(str1)+"<br>")

        document.write(str.search("sleep")+"<br>")

        document.write(str.slice(12))


        function msg(name="Anu"){
         return "Hello"+name
        }
        document.write(msg())//takes the default parameter
        document.write(msg("Sri"))//takes the parameter passed
    </script>
  </body>
</html>
```