**1a 1b 2a 2b**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Student Form</title>

<style>

body{

background-color: beige;

}

h1{

text-align: center;

font-family: 'Courier New', Courier, monospace;

font-style: italic;

font-weight: 400;

}

form{

text-align: center;

width: 100%;

background-color: aqua;

font-size: 25px;

font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;

font-weight: 200;

}

a{

font-size: 20px;

}

</style>

</head>

<body>

<h1>Student Application Form</h1>

<form id="Student-form">

First Name:<input type="text" name="stud first name" size="40"/></br></br>

Last Name:<input type="text" name="stud last name" size="40"/></br></br>

Email:<input type="email" name="stud email" size="40"/></br></br>

Phone Number:<input type="tel" name="stud phone number" size="40"/></br></br>

Date of Birth:<input type="date" name="stud date of birth"/></br></br>

<button type="submit">Login</button></br></br>

</form></br></br></br></br>

<h1>Hyperlink to go to google</h1>

<a href="https://www.google.com/" >Go to google</a>

</br></br></br></br>

<h1>For text box and text area</h1>

<form>

Textbox:<input type="text",name="textbox",id="textbox",placeholder="Enter text here "></br></br>

Textarea:<textarea id="multilinetxt" name="multilinetxt" rows="5" cols="50">Enter text here</textarea>

</form>

</br></br></br></br>

</body>

</html>

**3 function,loops,array**

function tsum(arr){

    let sum=0;

    for (let i=0;i<arr.length;i++){

        sum+=arr[i];

    }

    return sum;

}

const arr=[1,2,3,4,5];

console.log("array is:",arr);

const sum=tsum(arr);

console.log("sum is:",sum);

function nums(){

    for (let i=0;i<10;i++){

        console.log(i);

    }

}

nums()

let i=0;

do{

    console.log(i);

    i++;

}while (i<15);

**4a mouse click**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Left and Right Click</title>

</head>

<body>

    <h1>Handle mouse click</h1>

    <button class="button">CLICK ME!</button>

    <script>

        function handleLeftClick(event){

            console.log("left button clicked!");

        }

        function handleRightClick(event){

            console.log("right button clicked!");

            event.preventDefault();

        }

        document.addEventListener('click',function(event){

            if (event.button===0){

                handleLeftClick(event);

            }

        })

        document.addEventListener('contextmenu',handleRightClick);

    </script>

</body>

</html>

**4b scroll**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Left and Right Click</title>

</head>

<body>

    <h1>Handle mouse scroll</h1>

    <script>

        function scrollHandler(event){

            if (event.deltaY<0){

                console.log("scroll up");

            }

            else if (event.deltaY>0){

                console.log("scroll down");

            }

        }

        document.addEventListener('wheel',scrollHandler)

    </script>

</body>

</html>

**5 regex**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Student login</title>

</head>

<body>

<h1>Student login page</h1>

<form id="loginForm">

Username: <input type="text" id="username" name="username" required></br></br>

Password: <input type="password" id="password" name="password" required></br></br>

<button type="submit">Login</button>

</form>

<script>

document.getElementById('loginForm').addEventListener('submit',function(event){

event.preventDefault()

const username = document.getElementById('username').value;

const password = document.getElementById('password').value;

const usernameRegex=/^[a-zA-Z0-9\_-].{6,20}/;

const passwordRegex=/^(?=.\d)(?=.[a-z])(?=.\*[A-Z]).{8,20}/;

if (!usernameRegex.test(username)){

alert("unsername invalid");

return;

}

if (!passwordRegex.test(password)){

alert("invalid password");

return;

}

alert ("login successful");

})

</script>

</body>

</html>