Trial2
index.html

```html
<!DOCTYPE html>
<head>
  <style>
        .hdng{
        color:brown;
        text-decoration: underline;
        }
        #myDiv1, #myDiv2 {
        background-color:lightgreen;
        padding: 50px;
        }

        #myP1, #myP2 {
        background-color: white;
        font-size: 20px;
        border: 1px solid;
        padding: 20px;
        }
        </style>
<script>
  function power(x,y){
        var pow=1;
        for (var i=0;i<y;i++){
        pow = pow*x;
        }
        return pow;
  }

  function validateForm() {
        var x = document.forms["myForm"]["myfname"].value;
  if (x == "") {
        alert("Name must be filled out");
        return false;
        }
 }
</script>
</head>
<html>

<body>
  <div style=text-align:center;background:cornflowerblue>
        <h1 >Welcome</h1>
        <h2>Let us learn JavaScript</h2>
        <p id="intro">Hello All</p>
        <button type=button onclick="displayDate()">Date</button>
        <p style=display:inline id=date></p>
```

```html
        <button type="button" onclick= document.write("Overwritten") >Write</button>
        <button type="button" onclick=alert("Cautious!!")>Alert</button>
        <button type="button" onclick="print()">Print this page</button>
</div>

<h4 class=hdng>Scope of variables using var and let</h4>
<p id=scope></p>
<h4 class=hdng>Invoking function </h4>
<p id=par2></p>
<h4 class=hdng>Changing value of an element</h4>
<p id=par1></p>
<h4 class=hdng>Extract values from an HTML element</h4>
<p id=extrt></p>
<h4 class=hdng>Creating objects</h4>
<p id=obj></p>
<h4 class=hdng>Displaying list using array and 'for'</h4>
<p id=arrFor></p>
<h4 class=hdng>Displaying list using array and 'for each'</h4>
<p id=arrFE></p>
<h4 class=hdng>Event Handling</h4>
<button id="myBtn">Multiple Event Handler</button>
<p id=evnt></p>
<h4 class=hdng>Event listener for window. Resize to see the effect</h4>
<p id=evnt1></p>

<h4 class=hdng>Form validation</h4>
        <form name="myForm" onsubmit="return validateForm()" style=background:violet>
        Name: <input type="text" name="myfname">
        <input type="submit" value="Submit">
        </form>

 <h4 class=hdng>Field Validation</h4>
        <p>Please input a number between 1 and 10:</p>
        <input id="numb">
        <button type="button" onclick="validateField()">Submit</button>
        <p id="vldt"></p>

        <form id="frmExt" style=background:darksalmon>
        <br>
        First name: <input type="text" name="frmFname" ><br>
        Last name: <input type="text" name="lname"><br><br>
        <input type="submit" value="Submit">
        </form>
        <p>Click "Get values" to display the value of each element in the form.</p>
        <button onclick="formDisplay()">Get values</button>
        <p id="frmVal"></p>

        <h4 class=hdng>Event properties</h4>
```

```html
  <div id="myDiv1">
        <h2>Bubbling:</h2>
        <p id="myP1">Click me!</p>
  </div><br>

  <div id="myDiv2">
        <h2>Capturing:</h2>
        <p id="myP2">Click me!</p>
  </div>

<script>
/******************scope of variables********************/
var  sc = 10;
// Here x is 10
{
  let sc = 2;
  // Here x is 2
}
document.getElementById("scope").innerHTML = sc;
/************** Function & setting attribute**************/
var x = 5;
var y = 2;
var z = x * y;
document.getElementById("par1").innerHTML = z;
document.getElementById("par2").innerHTML = power(4, 3);
/************* Objects**************************/
var student = {regno:7184, slot: "XX", univ:"VIT_AP", disp:function(){return this.regno+"
"+this.slot}};
document.getElementById("obj").innerHTML = student.disp();
/***********Array using for********************/
var batch, text, fLen, i;
batch = ["Senior", "Sophomore", "Junior", "Fresher", 2020];
fLen = batch.length;

text = "<ul>";
for (i = 0; i < fLen; i++) {
  text += "<li>" + batch[i] + "</li>";
}
text += "</ul>";
document.getElementById("arrFor").innerHTML = text;
/*******************array using ForEach****************/
var batch1, text;
batch1 = ["Senior", "Sophomore", "Junior", "Fresher"];

text = "<ul>";
batch1.forEach(funcFE);
text += "</ul>";
document.getElementById("arrFE").innerHTML = text;
```

```javascript
function funcFE(value) {
  text += "<li>" + value + "</li>";
}
/***********************Extract values of elements********************/
var myElement = document.getElementById("intro");
document.getElementById("extrt").innerHTML =
"The text from the intro paragraph is " + myElement.innerHTML;


/******************Date***********************/
function displayDate() {
  document.getElementById("date").innerHTML = Date();
}
/**************** Multiple events for same button************************/
var btn = document.getElementById("myBtn");
btn.addEventListener("mouseover", btnFunc);
btn.addEventListener("click", btnFunc1);
btn.addEventListener("mouseout", btnFunc2);

function btnFunc() {
  document.getElementById("evnt").innerHTML += "Moused over!<br>";
}

function btnFunc1() {
  document.getElementById("evnt").innerHTML += "Clicked!<br>";
}

function btnFunc2() {
  document.getElementById("evnt").innerHTML += "Moused out!<br>";
}
/********** Event listener for window*****************/
  window.addEventListener("resize", function(){
        document.getElementById("evnt1").innerHTML = Math.random();
  });
  /********** To validate a field ***********/
function validateField() {
  var x, text;

  // Get the value of the input field with id="numb"
  x = document.getElementById("numb").value;

  // If x is Not a Number or less than one or greater than 10
  if (isNaN(x) || x < 1 || x > 10) {
        text = "Input not valid";
  } else {
        text = "Input OK";
  }
  document.getElementById("vldt").innerHTML = text;
```

```
        }
/************ To extract values from a form **********/
function formDisplay() {
  var x = document.forms["frmExt"];
  var text = "";
  var i;
  for (i = 0; i < x.length ;i++) {
        text += x.elements[i].value + "<br>";
  }
  document.getElementById("frmVal").innerHTML = text;
}
/****************** Event Properties ************************/
document.getElementById("myP1").addEventListener("click", function() {
        alert("You clicked the white element!");
  }, false);

  document.getElementById("myDiv1").addEventListener("click", function() {
        alert("You clicked the orange element!");
  }, false);

  document.getElementById("myP2").addEventListener("click", function() {
        alert("You clicked the white element!");
  }, true);

  document.getElementById("myDiv2").addEventListener("click", function() {
        alert("You clicked the orange element!");
  }, true);
</script>
</body>
</html>
```