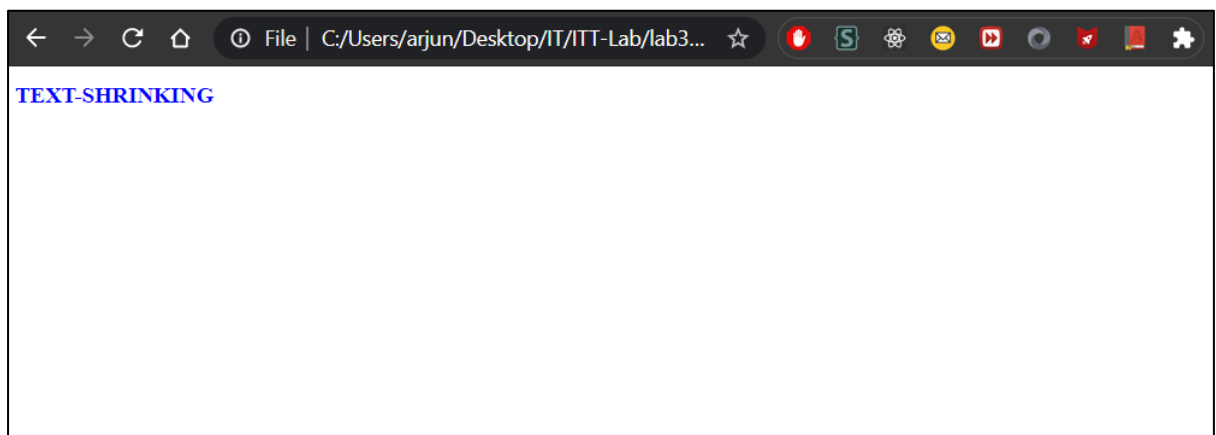
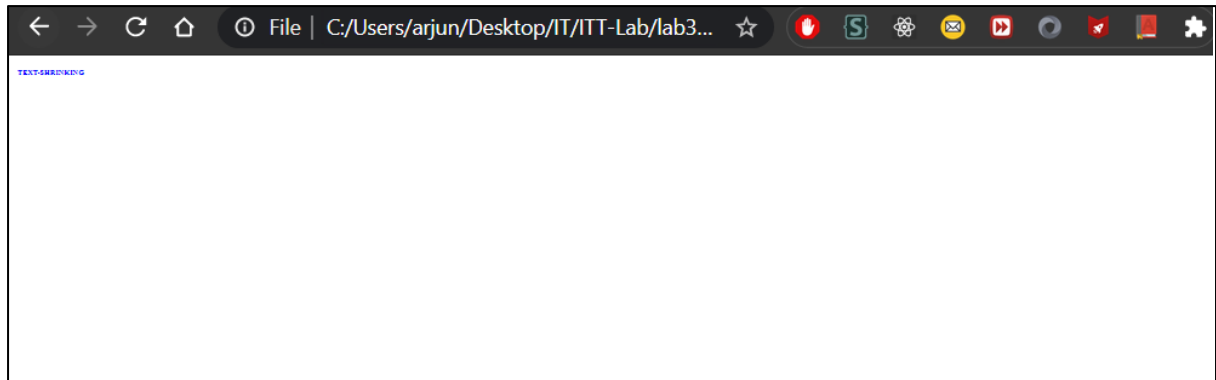


LAB 3

Q1.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Q1</title>
  </head>
  <body>
    <h1 style="font-size: 5px;color: red;">TEXT-GROWING</h1>
    <script>
      let dec = false;
      t = setInterval(() => {
        let text = document.getElementsByTagName("h1")[0];
        let font = window
          .getComputedStyle(text, null)
          .getPropertyValue("font-size");
        let current = parseFloat(font);
        if (dec) {
          text.style.fontSize = current - 5 + "px";
        } else {
          text.style.fontSize = current + 5 + "px";
        }
        if (current >= 50) {
          dec = true;
          text.innerText = "TEXT-SHRINKING";
          text.style.color = "blue"
        }
        if(parseFloat(window.getComputedStyle(text,null).getPropertyValue("font-size")) == 5) clearInterval(t)
      }, 100);
    </script>
  </body>
</html>
```

Output:



Q2.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>q2</title>
</head>
<body>
  <label for="word">Enter a word</label>
  <input type="text" id="word">
  <br><br>
  <button onclick="pigLatin()">Convert to piglatin</button>
  <br><br>
  <p>PigLatin: </p>
  <textarea id="piglatin"></textarea>
</body>

<script>
  function pigLatin(){
    var word = document.getElementById("word").value
    console.log(word)
    let arr = word.split(" ")
    for(let i=0; i<arr.length; i++){
      arr[i]= arr[i].substring(1,arr[i].length) +arr[i].substring(0,1) +
      "ay"
    }

    document.getElementById("piglatin").innerHTML += (arr.join(" ") + " ")
  }
</script>
</html>
```

Output:



Q5.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h1>Squares and Cubes</h1>
  <button onclick="execute()">generate</button>
  <br><br>
  <table id="sq">
    <tr>
      <th>Number</th>
      <th>Square</th>
      <th>Cubes</th>
    </tr>
  </table>
</body>
<script>
  function execute() {
    table = document.getElementById('sq')
    for(let i=0; i<10; i++){
      table.innerHTML += `<tr><td> ${i} </td> <td>${i*i}</td><td>${i*i*i}
    </td></tr>`
    }
  }
</script>
</html>
Output:
```



Squares and Cubes		
<button>generate</button>		
Number	Square	Cubes
0	0	0
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729

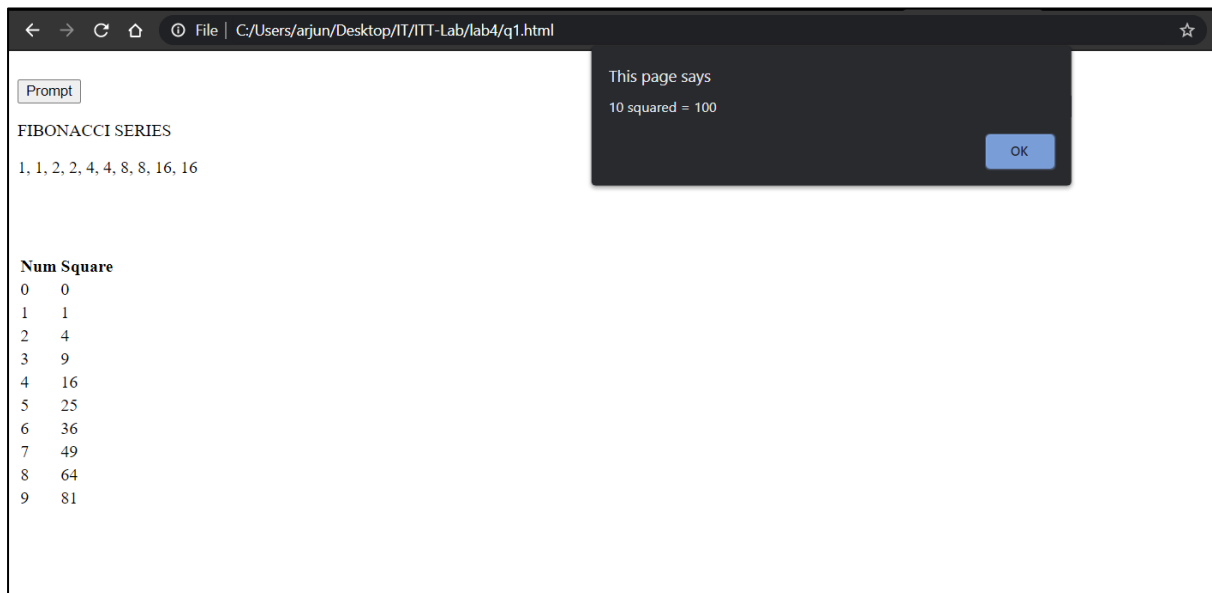
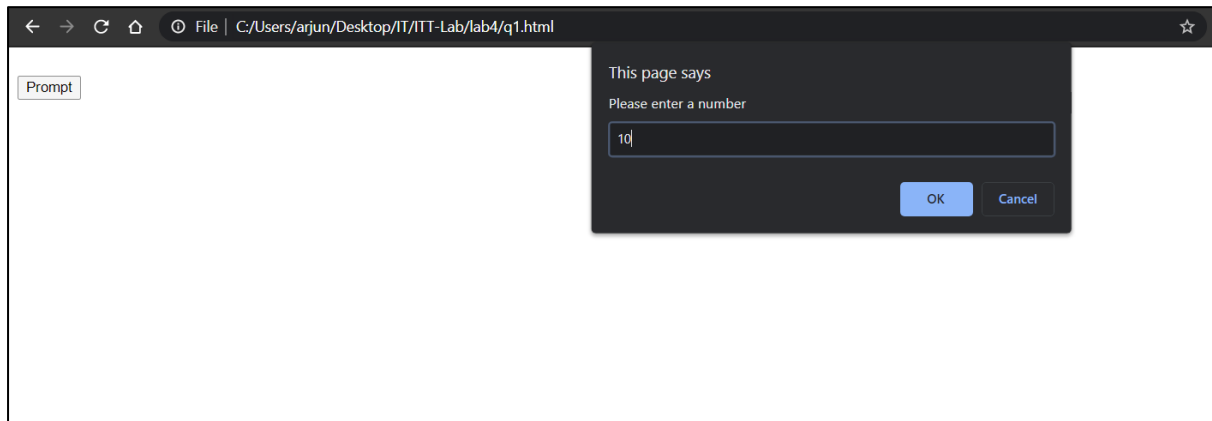
Lab 4

Q1.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <!-- <label for="n1">Input a number</label>
  <input type="text" id="num"> -->
  <br>
  <button onclick="execute()">Prompt</button>
  <p>FIBONACCI SERIES</p>
  <p id="fibonacci"></p>
  <br><br><br>
  <table id="sq">
    <tr>
      <th>Number</th>
      <th>Square</th>
    </tr>
  </table>
</body>
<script>
  function execute(){
    fib = []
    fib.push(1)
    fib.push(1)
    var n = parseInt(prompt("Please enter a number" ))
    //var n = parseInt(document.getElementById("num").value)
    console.log(n)
    if(isNaN(n)){
      alert("Enter a number")
      return
    }
    for(let i=0; i<n-2; i++){
      fib.push(fib[i] + fib[i])
    }
    var output = fib.join(', ')
    document.getElementById('fibonacci').innerHTML = output
    table = document.getElementById('sq')
    for(let i=0; i<n; i++){
      table.innerHTML += `<tr><td> ${i} </td> <td>${i*i}</td></tr>`
    }
    setTimeout(function(){
```

```
        alert(`${n} squared = ${n*n}`)  
    }, 1000);  
  
}  
</script>  
</html>
```

Output:



Q4.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <label for="n1">Enter a USN number: </label>
  <input type="text" id="USN">
  <br>
  <p id="warning" style="color: orange;"></p>
  <button id="submit" disabled='true'>Submit</button>
  <!--Assuming first character of USN is semester (1-4)-->
</body>
<script>
  var inputText = document.getElementById('USN')
  var submit = document.getElementById('submit')
  var warning = document.getElementById('warning')
  inputText.addEventListener('input', ()=>{
    warning.style.color = 'orange'
    submit.setAttribute('disabled', 'true')
    if(inputText.value.length !=10){
      console.log(inputText.value.length)
      document.getElementById('warning').innerText = "USN number should
be 10 digits, no spaces allowed."
      return
    }
    if(!Number.isInteger(parseInt(inputText.value[0]))){
      document.getElementById('warning').innerText = 'First character ha
s to be an integer!'
      return
    }
    if(parseInt(inputText.value[0])>4 || parseInt(inputText.value[0]) <1){
      document.getElementById('warning').innerText = 'First digit should
lie between 1 and 4!'
      return
    }
    if(!(inputText.value[1]>="A" && inputText.value[1]<="Z") || !(inputTex
t.value[2]>="A" && inputText.value[2]<="Z")){
      document.getElementById('warning').innerText = 'Second and third c
haracter should be uppercase!'
      return
    }
    if(Number(inputText.value.substring(3,5))>false:true){
```

```

        document.getElementById('warning').innerText = 'Fourth and fifth c
haracter have to be integers!'
        return
    }

    if(! (inputText.value[5]>="A" && inputText.value[5]<="Z") || ! (inputTex
t.value[6]>="A" && inputText.value[6]<="Z")){
        document.getElementById('warning').innerText = 'Sixth and seventh
character should be uppercase!'
        return
    }
    if(Number(inputText.value.substring(7,10))?false:true){
        document.getElementById('warning').innerText = 'Seventh eighth and
ninth character have to be integers!'
        return
    }

    else{
        warning.style.color = 'green'
        warning.innerText = 'Looks good!'
        submit.removeAttribute('disabled')
        submit.addEventListener('click', ()=>{
            alert(`You are in Sem ${inputText.value[0]}!`)
        })
    }

    })
</script>
</html>

```

Output:

