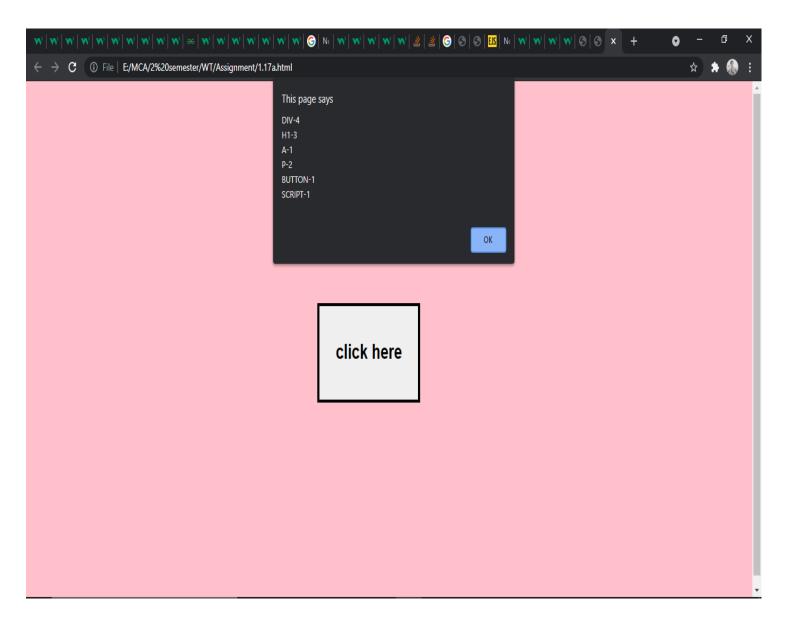
1.17) Create a program to get count of HTML tags. Eg:  $\langle \text{div} \rangle = 2$ ,  $\langle \text{p} \rangle = 4$ . Consider elements from the body tag only.

```
<!DOCTYPE html>
<html id="h">
   <head id="H1"><title>1.5</title>
       <style>
           body{
               background: pink;
           div{
               display: block;
              align-items: center;
           #demo{
               padding: 30px;
               padding-top: 50%;
               padding-left: 50%;
           button{
               padding: 30px;
               margin: 20% 40%;
               border: 4px solid black;
           }
       </style>
   </head>
   <body id="H2">
       <div></div>
       <div id="try"><h1><a href=""></a></h1></div>
       <div id="try2"><h1></h1></div>
       <div id="try3"></div>
       <button onclick="show()"><h1>click here</h1></button>
       <script type="text/javascript">
                //d -recursive calling
       let show=() =>{
           let TagStore=Array()
              let j=0;
              let show1=()=>{
                  return GetElement(document.body,0);
              let GetElement=(root,level)=>{
                  let type=window.NODE ?NODE.ELEMENT_NODE:1;
```

```
if(root.nodeType==type){
                        setElement(level,root.nodeName)
                        let child=root.children;
                        for(let i=0;i<child.length;i++){</pre>
                            GetElement(child[i],level+1);
                        }
                    }
               }
               let setElement=(level,node_name)=>{
                   let n=TagStore.includes(node name);
                         TagStore[j]=node name;
                     j=j+1;
               show1()
                     A="";
              let
              let Check=Array();
               for(let i=1;i<TagStore.length;i++){</pre>
                         count=0;
                    let
                    if(Check.includes(TagStore[i])==true){}
                   else{
                    for(let j=0;j<TagStore.length;j++){</pre>
                          if(TagStore[i]==TagStore[j]){
                              count=count+1;
                              Check[i]=TagStore[i];
                     }
                     A+=TagStore[i]+"-"+count+"\n";
                     document.getElementById("display").innerHTM
L+="\n"+TagStore[i]+"-"+count+"\n";
                   } alert(A);
             }</script>
     </body>
</html>
```



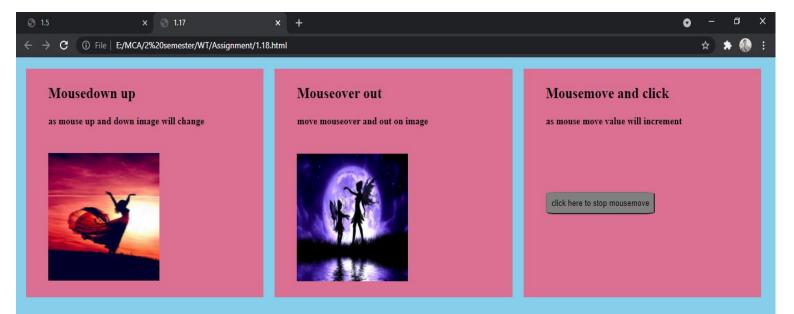
1.18) Create a program to demonstrate handling of all mouse events using addEventListener() method.

```
<!DOCTYPE html>
<html>
<head><title>1.17</title>
<style>
    body{
       background-color:skyblue;
        background-repeat: no-repeat;
        box-sizing: border-box;
    }
    .column {
  float: left;
  width: 28.33%;
  padding:5px 5px 5px 40px;
  background: palevioletred;
  margin: 10px;
/* Clearfix (clear floats) */
.row {
 content: "";
 clear: both;
 display: flex;
  /*display: table;*/
div.column1{
   margin-top: 35px;
   margin: 10px;
.ReLoad{
    margin:auto;
    margin-left: 40rem;
img{
    margin-top: 20px;
    width: 100%
.para1{
    text-transform: uppercase;
    text-align: center;
```

```
button{
   padding: 8px;
   border-radius: 10%;
   background:grey;
   margin-top: 70px;
   </style>
</head>
<body>
       <div id="mainclass">
                  <!--mouse down and mouse up events-->
          <div class="row">
             <div class="column" id="coloum">
                 <h2>Mousedown up</h2>
                 <img src="aa.jpg" id="image" style="wid</pre>
th:200px; height:200px"; />
                      </div>
       <!--Mouse Over and mouse out-->
             <div class="column column1" id="coloum1">
                 <h2>Mouseover out</h2>
              <h1></h1>
              <img src="dd.jpg" id="image0" style="height: 20</pre>
0px; width:200px;" />
              </div>
              <div class="column column2" id="coloum2">
                  <h2>Mousemove and click</h2>
               <h1></h1>
               <button id="but" >click here to stop</button>
             </div>
               </div>
              <div class="para" >
                 <h1> Double clic
k here to change background color
                  </h1></div>
       </div>
       <div>
```

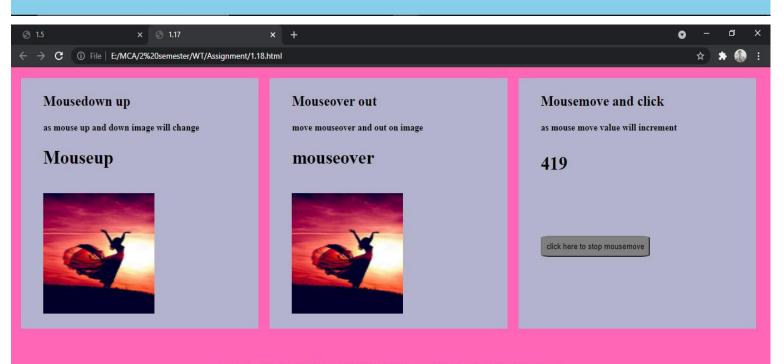
```
<button class="ReLoad" onClick="window.location.rel</pre>
oad();"> Reload page</button onclick="window.location.reload();</pre>
        </div>
<script>
    /*mouse down mousup*/
document.getElementById("image").addEventListener("mousedown",f
unction(){
document.getElementById("A").innerHTML="<h1> Mousedown<h1>";
document.getElementById("image").src="bb.jpg";
});
document.getElementById("image").addEventListener("mouseup",fun
ction(){
    document.getElementById("A").innerHTML="<h1> Mouseup<h1>";
    document.getElementById("image").src="aa.jpg";
});
/*mouseover mouseout*/
let OverOut=(Img,t)=>{
    document.getElementById("image0").src=Img;
    document.getElementById("A1").innerHTML="<h1>"+t+"<h1>";
  }
document.getElementById("image0").addEventListener("mouseover",
function(){
    OverOut("aa.jpg"," mouseover")});
 document.getElementById("image0").addEventListener("mouseout",
function(){
    document.getElementById("image0").addEventListener("mouseou
t",function(){
    OverOut("dd.jpg"," mouseout")});
});
/*ondbclick*/
function myFunction(c1,c2,event) {
    document.body.style.background=c1;
    document.getElementById("coloum").style.background=c2
```

```
document.getElementById("coloum1").style.background=c2;
    document.getElementById("coloum2").style.background=c2;
  document.getElementById("para1").innerHTML= event
document.getElementById("para1").addEventListener("dblclick",fu
nction(){ myFunction("#ff66b3","#b3b3cc","<h2>background change
d</h2>")},false);
/*document.getElementById("para1").addEventListener("dblclick",
function(){ myFunction("#00a3cc","#ff0055","<h2>back to normal<</pre>
/h2>")},false)*/
/*mousemoove*/
let n=0;
function Fun()
       document.getElementById("A2").innerHTML=n+=1;
let RemoveEvent=()=>{
        document.getElementById("coloum2").removeEventListener(
"mousemove",Fun);
document.getElementById("coloum2").addEventListener("mousemove"
,Fun);
document.getElementById("but").addEventListener("click",RemoveE
vent);
</script>
</body>
</html>
```



## DOUBLE CLICK HERE TO CHANGE BACKGROUND COLOR

Reload page



## **BACKGROUND CHANGED**

Reload page

1.19) Demonstrate capturing, bubbling and target event propagation.

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <title>
            event propagation 1.19
        </title>
        <style>
            div.container{
                align-items: center;
                padding: 10% 10% 15% 20%;
                display: flex;
            button{
                align-items: center;
                padding: 30px;
                margin: 0px
            h4{
                padding: 0%;
                margin: 0%;
            }
 </style>
    </head>
        <body>
            <div class="container">
                <div id="a1" style="background:red;margin:20px;</pre>
 padding:15px 10px 10px 10px;" ><h4>first</h4>
                    <div id="a2" style="background: powderblue;</pre>
padding:20px" ><h4>second</h4>
                         <div id="a3" style="background: royalbl</pre>
ue;padding:15px;"><h4>third</h4>
                <button id="click1" class="click1" >clck1
on>
                </div>
                     </div>
                          </div>
                <div id="b1" style="background:red;margin:20px;</pre>
padding:15px 10px 10px 10px;"><h4>first</h4>
                     <div id="b2" style="background: powderblue;</pre>
 padding: 20px;"><h4>second</h4>
```

```
<div id="b3" style="background: royalb1</pre>
ue;padding: 15px;"><h4>third</h4>
                             <button id="click2" class="click2"</pre>
>clck2</button>
                         </div>
                     </div>
                </div>
                <div id="c1" style="background:red;margin:20px;</pre>
padding: 15px 10px 10px 10px;"><h4>first</h4>
                    <div id="c2" style="background: powderblue;</pre>
padding: 20px;"><h4>second</h4>
                         <div id="c3" style="background: royalbl</pre>
ue; padding:15px;">
                          <h4 style="padding-
top:0px;">third</h4><button id="click3" class="click3" >clck3
button>
                         </div>
                     </div>
                </div>
            </div>
            <script>
            /*section A*/
            let ShowResult=(n,m)=>{
                alert("you clicked\nbutton "+n+m);
                console.log(n+"-"+m);
            document.getElementById("a1").addEventListener("cli
ck",function()
                {
                     ShowResult("click1 ","first");
                },false);
                document.getElementById("a2").addEventListener(
"click",function()
                     ShowResult("click1 ","second");
                    console.log("stop propagation");
                     event.stopPropagation();
                },true);
                document.getElementById("a3").addEventListener(
"click",function()
                    ShowResult("click1 ","third");
                },false);
```

```
/*section B*/
                document.getElementById("b1").addEventListener(
"click",function()
                    ShowResult("click2 ","first");
                },false);
                document.getElementById("b2").addEventListener(
"click",function()
                    ShowResult("click2 ","second"+" -
target listener")
                },true);
                document.getElementById("b3").addEventListener(
"click",function()
                    ShowResult("click2 ","third");
                 },false);
             /*section 3*/
             document.getElementById("c1").addEventListener("c1
ick",function()
                {
                    ShowResult("click3 ","first");
                },true);
                document.getElementById("c2").addEventListener(
"click",function()
                    ShowResult("click3 ","second");
                },true);
                document.getElementById("c3").addEventListener(
"click",function()
                    ShowResult("click3 ","third");
                 },true);
                </script>
                    </body>
                </head>
            </html>
```

