DOM ASSIGNMENT

Question . 1. Create Increment Decrement counter web.

Answer:-

Html Code:

```
<!DOCTYPE html>
<html <pre>lang="en">
<head>
    <meta <pre>charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="./style.css">
   <title>Inc Dnc</title>
</head>
<body>
    <div id="container">
        <h1 id="head">Counter App</h1>
        <div>
            <Button id="dec">Decrement by 1
            <span id="displayValue">0</span>
            <Button id="inc">Increment by 1
        <button id="reset">reset</button>
    </div>
    <script src="./script.js"></script>
</body>
</html>
```

CSS code:-

```
*{
    margin:0px;
    padding:0px;
}

body{
    display: flex;
    justify-content: center;
    align-items: center;
    height: 80vh;
}

#container{
    display: flex;
```

```
justify-content: center;
    justify-items: center;
    display: table-column;
   column-gap: 5px;
    border: 2px solid;
   padding: 20px;
#head{
   padding: 30px;
    margin-left: 5px;
    background-color: aqua;
    border-radius: 25px;
#dec{
    padding: 10px;
    margin: 2px;
    margin-top: 20px;
#inc{
   padding: 10px;
    margin: 2px;
    margin-top: 20px;
#displayValue{
    padding:10px;
    border: 2px solid black;
#reset{
    margin-left:114px;
    margin-top: 20px;
    padding: 10px;
```

JavaScript Code:-

```
const dec = document.getElementById("dec")
const inc = document.getElementById("inc")
const display = document.getElementById("displayValue")
const reset = document.getElementById("reset")

dec.addEventListener("click",()=>{
    const value = Number(display.innerText);
    if(value>0){
        display.innerText = value - 1;
    }else{
        alert("Negative Value not allowed")
    }
});
```

```
inc.addEventListener("click",() => {
    const value = Number(display.innerText);

if(display.innerText > 20){
    alert("You have done enough increment")
    return;
}else{
    display.innerText=value+1;
}
})

reset.addEventListener("dblclick", ()=>{
    display.innerText = 0;
})
```

OutPut:-



Question – 2: Create 06 different projects on using different types of event listener

- 1. MouseOut
- 2. Mouse Over
- 3. Single Click
- 4.Double Click
- 5. Press any key

6. press up key

Answer:-

1. MouseOut

→ Html Code:

```
<!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">
    <link rel="stylesheet" href="./style.css">
   <title>MouseOut</title>
</head>
<body>
    <div id="content">
       Here
    </div>
   <script src="./script.js"></script>
</body>
</html>
```

CSS code:

```
*{
    margin: 0px;
    padding: 0px;
}

body{
    margin: 30vh;
    display: flex;
    justify-content: center;
    align-items: center;
}

#content{
    padding: 100px;
    background-color: aqua;
}
```

JavaScript Code:

```
const content = document.getElementById("content");
```

```
content.addEventListener("mouseout",() =>{
    content.style.backgroundColor="red";
})

content.addEventListener("mouseenter",() => {
    content.style.backgroundColor="white";
})
```

OutPut:-

1.When mouseOut is red



2. When MouseEnter on the red box it will become white

2.On Single Click:

→ Html Code:

```
<!DOCTYPE html>
<html <pre>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">
    <link rel="stylesheet" href="./style.css">
   <title>OnClick Event</title>
</head>
<body>
   <div id="content">
        <div id="onclick">This is onclick event</div>
        <button id="click">Click Me</button>
    </div>
    <script src="./script.js"></script>
</body>
</html>
```

CSS Code:

```
margin: 0px;
    padding: 0px;
body{
    margin: 40vh;
    display: flex;
   justify-content: center;
    align-content: center;
#content{
    padding: 10vh;
    background-color: black;
   color: aqua;
   border-radius: 20px;
   display: flex;
   flex-direction: column;
    justify-content: center;
   align-items: center;
   justify-items: space-between;
#click{
    background-color: aliceblue;
    color: bisque;
   border-radius: 20px;
    align-content : space-between;
```

```
#click{
   background-color: yellow;
   color: red;
   border-radius: 10px;
   padding: 10px;
   align-content: center;
}
```

JavaScript Code:

```
const content = document.getElementById("content")
const eventh = document.getElementById("click")

eventh.addEventListener("click",() => {
    content.innerText="You have Clicked";
})
```

Output:-

Before the click



After Click



3. On Double Click

→ Html Code:

```
<!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">
   <link rel="stylesheet" href="./style.css">
   <title>Ondoubleclick Event</title>
</head>
<body>
   <div id="content">
       Click the red button twice to save me
       <Button id="click"> Don't Click</Button>
   <script src="./script.js"></script>
</body>
</html>
```

CSS Code:

```
*{
    margin: 0px;
    padding: 0px;
}

body{
    margin-top: 40vh;
    display: flex;
    justify-content: center;
    align-items:center;
    justify-items: center;
}
```

```
#content{
    display: flex;
    flex-direction: column;
    align-items: center;
    gap: 25px;
    background-color: rgb(6, 6, 6);
    padding: 50px;
    color: aliceblue;
    border-radius: 20px;
}

#click{
    padding: 10px;
    background-color: #34f0e9;
}
```

JavaScript Code:

```
const button = document.getElementById("click")
const save = document.getElementById("content")

button.addEventListener("dblclick",()=>{
    save.innerText = "You have Saved Me"
})
```

OutPut:

Before the Double Click



You have Saved Me

4. MouseOver

→Html Code:

```
<!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">
   <link rel="stylesheet" href="./style.css">
   <title>MouseOver</title>
</head>
<body>
    <div id="content">
        <div id="para">Don't Hover here</div>
        <button id="here">Common baby</button>
    </div>
    <script src="./script.js"></script>
</body>
</html>
```

CSS Code:

```
*{
    margin: 0px;
    padding: 0px;
}
body{
```

```
display: flex;
    justify-content: center;
    align-content: center;
#content{
   margin: 40vh;
    background-color: black;
   display: flex;
   flex-direction: column;
   justify-content: center;
   align-items: center;
    justify-content: space-between;
    padding: 30px;
#para{
   padding: 50px;
   color: bisque;
   display: flex;
   justify-content: center;
   align-items: center;
#here{
    border-radius: 10px;
    padding: 10px;
```

JavaScript Code:

```
const content = document.getElementById("content");
const but = document.getElementById("here");

but.onmouseover = function(event) {
    let target = event.target;
    target.style.background = 'purple';
    target.innerText="ohh yeah";
};

but.onmouseout = function(event) {
    let target = event.target;
    target.style.background = '';
};
```

Output:

Before Mouse Over



After Mouse Over



5. On KeyPress

 \rightarrow When ever you press any key the background color change.

Html Code:

```
<!DOCTYPE html>
<html lang="en">
```

CSS Code:

```
#{
    margin: 0px;
    padding: 0px;
}

body{
    margin: 30vh;
    display: flex;
    justify-content: center;
    align-items: center;
}

#content{
    background-color: rgb(67, 197, 153);
    padding: 100px;
    display:flex;
    justify-content: center;
    border-radius: 25px;
}
```

JavaScript Code:

```
const cont = document.getElementById("content")

function generateRandomColor(){
    let maxVal = 0xFFFFFFF; // 167777215
    let randomNumber = Math.random() * maxVal;
    randomNumber = Math.floor(randomNumber);
    randomNumber = randomNumber.toString(16);
    let randColor = randomNumber.padStart(6, 0);
    return `#${randColor.toUpperCase()}`
}

cont.addEventListener("keypress" , ()=>{
    cont.style.backgroundColor= generateRandomColor();
})
```



Before any key press



After Key Press



It will change color when ever we press any key in the input section

6. On KeyUP

→ Html Code:

```
<!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>keyDown</title>
   <link rel="stylesheet" href="style.css">
</head>
<body>
    <div id="container">
        <div id="display">Press any key </div>
    </div>
    <script src="script.js"></script>
</body>
</html>
```

CSS Code:

```
#container {
    height: 100vh;
}

#display {
    font-size: 50px;
}
```

JavaScript Code:

```
let container = document.getElementById("container");
let display = document.getElementById("display");

document.addEventListener("keydown", function (e) {
    display.style.color = "red";
    display.innerText = e.key + " is keyDown";
});

document.addEventListener("keyup", function (e) {
    display.style.color = "green";
    display.innerText = e.key + " is keyUp";
});
```

| Output: | |
|------------------|--|
| Before press | |
| Press any key | |
| | |
| After Press | |
| ArrowUp is keyUp | |