IWP LAB

HARSHIL GUPTA
17BCE1112

1. Inserting numbers and displaying them using ADD and DISPLAY button

CODE

HTML

```
<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>JS Bin</title>
<style>
body {padding-top:50px}
</style>
</head>
<body>
<script src="pp1.js"></script>
<input type="text" id="text1"></input>
<input type="button" id="button1" value="Add" onclick="add();"></input>
<input type="button" id="button2" value="Display" onclick="dis();"></input>
<div id="Result"></div>
</body>
</html>
```

JAVASCRIPT

```
var x = 0;

var array = Array();

function add()

{

 array[x] = document.getElementById("text1").value;

 alert("Element: " + array[x] + " Added at index " + x);

 x++;

 document.getElementById("text1").value = "";

}


function dis()

{

  var e = "<hr/>";


  for (var y=0; y<array.length; y++)

  {

    e += "Element " + y + " = " + array[y] + "<br/>";

  }

  document.getElementById("Result").innerHTML = e;

}
```

OUTPUT

2. **Search using Binary Search method**

CODE

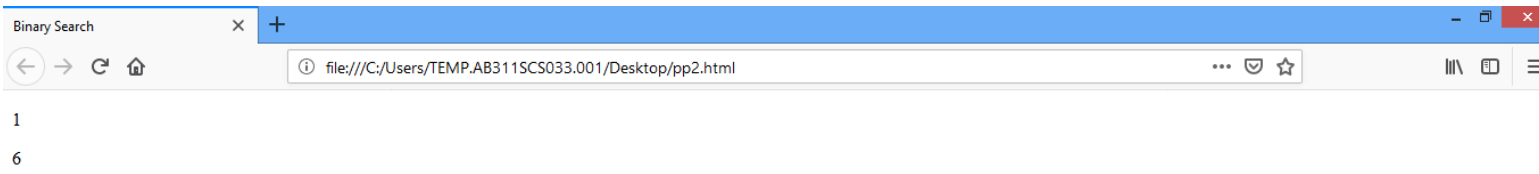
```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Binary Search</title>
</head>
<body>
<p id="l1"><center>
</center></p>
<p id="l2"><center>
</center></p>

<script>
function binary_Search(items, value){
   var firstIndex  = 0,
      lastIndex   = items.length - 1,
      middleIndex = Math.floor((lastIndex + firstIndex)/2);

   while(items[middleIndex] != value && firstIndex < lastIndex)
   {
      if (value < items[middleIndex])
      {
         lastIndex = middleIndex - 1;
      }
     else if (value > items[middleIndex])
      {
```

```
            firstIndex = middleIndex + 1;
        }
        middleIndex = Math.floor((lastIndex + firstIndex)/2);
    }
 return (items[middleIndex] != value) ? -1 : middleIndex;
}
var items = [11, 12, 13, 14, 15, 17, 18, 19];
console.log(binary_Search(items, 12));
console.log(binary_Search(items, 18));
document.getElementById("l1").innerHTML = binary_Search(items, 12);
document.getElementById("l2").innerHTML = binary_Search(items, 18);
```

</script>

```
</body>
</html>
```

OUTPUT



3. **Removing duplicate values from a given list of values**

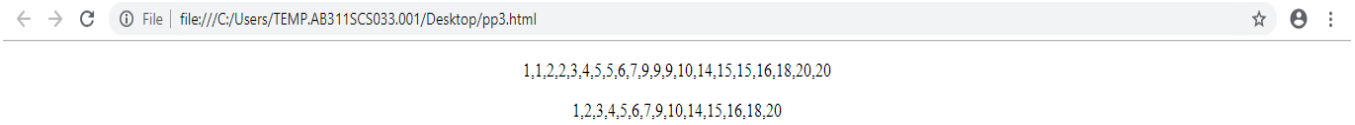
CODE

```
<!DOCTYPE html>
<html>
<head>
```

```
<meta charset="utf-8">
<title>DUPLICATE VALUES</title>
</head>
<body>
<center>
<p id="l1"></p>

<p id="l2"></p>
</center>
<script>
function removeDuplicates(num) {
  var x,
      len=num.length,
      out=[],
      obj={};

  for (x=0; x<len; x++) {
    obj[num[x]]=0;
  }
  for (x in obj) {
    out.push(x);
  }
  return out;
}
var Mynum = [1,1,2,2,3,4,5,5,6,7,9,9,9,10,14,15,15,16,18,20,20];
result = removeDuplicates(Mynum);
```

```
document.getElementById("l1").innerHTML = Mynum;

document.getElementById("l2").innerHTML = result;


</script>



</body>

</html>
```

OUTPUT



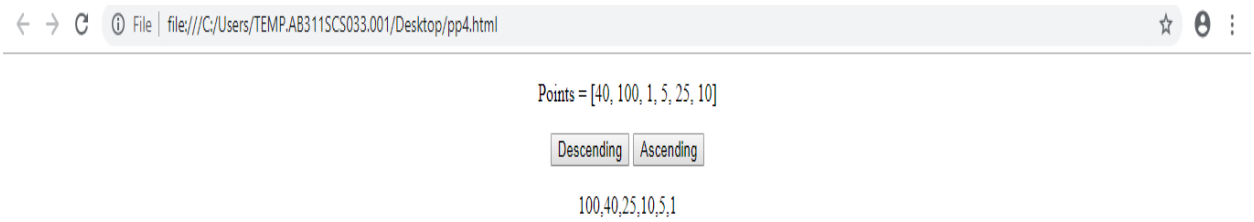
4. Input three values through three text boxes and display the output in a separate three text box. Use two buttons Ascending and Descending to perform the action.

CODE

```
<!DOCTYPE html>

<html>

<body>


<p><center>Points = [40, 100, 1, 5, 25, 10]</center></p>

<center>

<button onclick="myFunction1()">Descending</button>

<button onclick="myFunction2()">Ascending</button>
```

```
<p id="demo1"></p>

<p id="demo2"></p></center>


<script>

var points = [40, 100, 1, 5, 25, 10];

document.getElementById("demo").innerHTML = points;


function myFunction1() {

  points.sort(function(a, b){return b-a});

  document.getElementById("demo1").innerHTML = points.sort(function(a, b){return b-a});

}


function myFunction2() {

  points.sort(function(a, b){return b-a});

  document.getElementById("demo2").innerHTML = points.sort(function(a, b){return a-b});

}


</script>


</body>

</html>
```

OUTPUT



Points = [40, 100, 1, 5, 25, 10]

Descending Ascending

100,40,25,10,5,1

1,5,10,25,40,100