

### Area of circle

```
<html>
<body>
  <h1>Area and circumference of a circle</h1>
  Enter the radius for your circle:
  <input type="text" id="txtRadius" />
  <input type="button" value="Calculate" onClick=CalculateArea() />

  <script>
    function CalculateArea() {
      var radius = document.getElementById('txtRadius').value;
      alert("The area of the circle is " + (radius * radius * Math.PI));
    }
  </script>
</body>

</html>
```

### Perfect,Abundant,Deficient

```
<html>
<body>
  <h1>Perfect Number</h1>
  Enter a number:
  <input type="text" id="num" />
  <input type="button" value="Find" onClick="findPerfect()" /
  <script>
    function findPerfect() {
      var n = document.getElementById('num').value;
      var sum = 0;
      for (var i = 0; i < n; i++) {
        if (n % i == 0) {
          sum = sum + i;
        }
      }
      if (sum == n)
        alert("The number is perfect ");
      else if (sum > n)
        alert("The number is abundant");
      else
        alert("The number is deficient");
    }
  </script>
</body>
</html>
```

### Multiplication Table

```
<html>
<body>
  <h1>Multiplication Table</h1>
  Enter a number:
  <input type="text" id="num" /><br /><br />
  Enter limit:
  <input type="text" id="limit" />
  <input type="button" value="Find" onClick="multiply()" />
  <p id="result"></p>
```

```

<script>
function multiply() {
    var n = document.getElementById('num').value;
    var l = document.getElementById('limit').value;
    var out = "";
    for (var i = 1; i < l; i++) {
        out = out + i + " * " + n + " = " + i * n + "<br/>";
    }
    document.getElementById("result").innerHTML = out;
}
</script>
</body>
</html>

```

### Calculator

```

<html>
<head>
<script>
function add() {
    var a = parseInt(document.getElementById('a').value);
    var b = parseInt(document.getElementById('b').value);
    r = a + b;
    document.getElementById("result").innerHTML = a + " + " + b + " = " + r;
}
function sub() {
    var a = parseInt(document.getElementById('a').value);
    var b = parseInt(document.getElementById('b').value);
    r = a - b;
    document.getElementById("result").innerHTML = a + " - " + b + " = " + r;
}
function mul() {
    var a = parseInt(document.getElementById('a').value);
    var b = parseInt(document.getElementById('b').value);
    r = a * b;
    document.getElementById("result").innerHTML = a + " * " + b + " = " + r;
}
function div() {
    var a = parseInt(document.getElementById('a').value);
    var b = parseInt(document.getElementById('b').value);
    r = a / b;
    document.getElementById("result").innerHTML = a + " / " + b + " = " + r;
}
</script>
</head>
<body>
<h1>Calculator</h1>
<form>
    Enter number 1:
    <input type="text" id="a" /><br />
    Enter number 2:
    <input type="text" id="b" /><br />
    <input type="button" value="Add" onClick="add()" />
    <input type="button" value="Subtract" onClick="sub()" />
    <input type="button" value="Multiply" onClick="mul()" />
    <input type="button" value="Divide" onClick="div()" />
</form>
<p id="result"></p>

```

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

### **Bg Colour**

```
<html>
<body id="body">
  <input type="button" onmouseover="changeBg(0)" value="Red">
  <input type="button" onmouseover="changeBg(1)" value="Yellow">
  <input type="button" onmouseover="changeBg(2)" value="Blue">
  <input type="button" onmouseover="changeBg(3)" value="Green">
  <input type="button" onmouseover="changeBg(4)" value="Orange">
  <script>
    function changeBg(i) {
      const colors = ["red", "yellow", "blue", "green", "orange"];
      document.body.style.background = colors[i];
    }
  </script>
</body>
</html>
```

### **Palindrome**

```
<html>
<body>
  <h1>Palindrome</h1>
  Enter String: <input type="text" id="txt" />
  <input type="button" value="Check" onClick=checkPalindrome()/>
  <p id="result"></p>
  <script>
    function checkPalindrome() {
      var str = document.getElementById('txt').value;
      const len = str.length;
      var flag = 1;
      for (var i = 0; i < len / 2; i++) {
        if (str[i] !== str[len - 1 - i]) {
          flag = 0;
        }
      }
      if (flag == 1) {
        document.getElementById("result").innerHTML = "It is a palindrome";
      }
      else {
        document.getElementById("result").innerHTML = "It is not a palindrome";
      }
    }
  </script>
</body>
</html>
```

### **Sum of Array Using PopUp**

```
<html>
<body>
  <script>
    var n = window.prompt("Enter size of the array");
    var arr = new Array();
    var sum = 0;
    for (let i = 1; i <= n; i++) {
```

```
arr[i] = parseInt(window.prompt("Enter element " + i));
sum = sum + arr[i];
}
alert("Sum =" + sum);
</script>
</body>
</html>
```

### **onFocus() and onBlur()**

```
<html>
<body>
  Enter text :
  <input type="text" id="txtbox" onfocus=change(0) onblur=change(1)>
  <script>
    function change(i) {
      if (i == 0) {
        document.getElementById("txtbox").style.backgroundColor = "lightgrey";
        document.getElementById("txtbox").style.color = "blue";
      }
      else {
        document.getElementById("txtbox").style.backgroundColor = "white";
        document.getElementById("txtbox").style.color = "black";
      }
    }
  </script>
</body>
</html>
```

### **Capital**

```
<html>
<body>
  Select a country :
  <select id="countries" onchange=getCapital(>
    <option value="0">Australia</option>
    <option value="1">Poland</option>
    <option value="2">Mexico</option>
    <option value="3">Germany</option>
    <option value="4">India</option>
  </select>
  <br/><br/>
  Capital: <input type="text" id="txtbox">
  <script>
    function getCapital() {
      var capitals=["Canberra","Warsaw","Mexico City","Berlin","New Delhi"];
      var i = document.getElementById("countries").selectedOptions[0].value;
      document.getElementById("txtbox").value = capitals[i];
    }
  </script>
</body>
</html>
```

### **Password Validation**

```
<html>
<body>
  <h1>Password Validation</h1>
  Password: <input type="text" id="pass"><br />
```

```
Confirm Password: <input type="password" id="confirm"><br />
<input type="submit" onClick="verify()">
<p id="txt"></p>
<script>
  function verify() {
    document.getElementById("txt").innerHTML = "";
    if (document.getElementById("pass").value != document.getElementById("confirm").value) {
      document.getElementById("txt").innerHTML += "Password and confirm password must be same.";
    }
    if (document.getElementById("pass").value.length < 8) {
      document.getElementById("txt").innerHTML += "<br/>Password must be greater than 8 characters.";
    }
  }
</script>
</body>
</html>
```