

CALCULATOR PROJECT

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Developing a Calculator after learning basic of HTML, CSS & JavaScript is one of the best ways to understand the core concept and implement it to make something useful. This Calculator you can modify as per your need to perform both simple and complex calculations. It should include +, -, *, / operations along with calculating modulo (%) and performing square of a number. Also, add AC (All Clear) button to clear the current text and Equal key for performing the operation. The calculator should perform operation using both Decimal and Whole numbers. You can add more functionality as per your need but the above-mentioned one are a must to have.

Must use the following for development:

- ☐ HTML
- ☐ CSS(Flexbox or Grid) and Bootstrap
- ☐ JavaScript(Event listeners, multiple functions, loops, if/else, InnerText/InnerHtml)
- ☐ Use comments wherever possible to make it readable for others.
- ☐ Deploy your code to GitHub and merge with Netlify to make it live.
- ☐ Do not use any external library for this.
- ☐ Build your own logic do not copy paste from google.
- ☐ Design can be as per your vision and make it as creative as you can.

HTML Code:

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

<head>
  <meta charset="utf-8">
  <title>Simple Calculator </title>
  <link rel="stylesheet" href="calculator.css">
</head>

<body>

<table class="calculator" >
  <tr>
    <td colspan="3"> <input class="display-box" type="text" id="result" disabled /> </td>

    <!-- clearScreen() function clears all the values -->
    <td> <input type="button" value="C" onclick="clearScreen()" id="btn" /> </td>
  </tr>

  <tr>
    <!-- display() function displays the value of clicked button -->
    <td> <input type="button" value="1" onclick="display('1')" /> </td>
    <td> <input type="button" value="2" onclick="display('2')" /> </td>
    <td> <input type="button" value="3" onclick="display('3')" /> </td>
    <td> <input type="button" value="/" onclick="display('/')" /> </td>
  </tr>

  <tr>
    <td> <input type="button" value="4" onclick="display('4')" /> </td>
    <td> <input type="button" value="5" onclick="display('5')" /> </td>
    <td> <input type="button" value="6" onclick="display('6')" /> </td>
    <td> <input type="button" value="-" onclick="display('-)" /> </td>
  </tr>
```

CALCULATOR PROJECT

BRINDA R

```
<tr>
  <td> <input type="button" value="7" onclick="display('7')" /> </td>
  <td> <input type="button" value="8" onclick="display('8')" /> </td>
  <td> <input type="button" value="9" onclick="display('9')" /> </td>
  <td> <input type="button" value="+" onclick="display('+)" /> </td>

</tr>
<tr>
  <td> <input type="button" value="." onclick="display('.')" /> </td>
  <td> <input type="button" value="0" onclick="display('0')" /> </td>
  <!-- calculate() function evaluates the mathematical expression -->
  <td> <input type="button" value="=" onclick="calculate()" id="btn" /> </td>
  <td> <input type="button" value="*" onclick="display('*)" /> </td>
</tr>
</table>

<script type="text/javascript" src="calculator.js"></script>

</body>

</html>
```

CSS Code:

```
.calculator{
padding: 10px;
border-radius: 1em;
height: 500px;
width: 500px;
margin: auto;
background-image: linear-gradient(rgb(0, 0, 0), lightblue,black);
box-shadow: rgb(128, 128, 128) 0px 10px 20px, rgb(128, 128, 128) 0px 6px 6px;
}
```

```
.display-box {
font-family: 'Orbitron', sans-serif;
background-color: #dcdbe1;
border: solid black 0.5px;
color: rgb(0, 0, 0);
border-radius: 5px;
width: 100%;
height: 65%;
}
```

```
input[type=button] {
font-family: 'Orbitron', sans-serif;
width: 100%;
border-radius: 5px;
height: 70%;
outline: none;
font-size: 150%;
font-weight: bold;
}
```

CALCULATOR PROJECT

BRINDA R

```
input:active[type=button] {  
  background: rgb(192, 192, 192);  
  -webkit-box-shadow: inset 0px 0px 5px #c1c1c1;  
  -moz-box-shadow: inset 0px 0px 5px #c1c1c1;  
  box-shadow: inset 0px 0px 5px #c1c1c1;  
}
```

```
/* Bootstrap styles for buttons */
```

```
input[type=button].btn {  
  padding: 10px;  
  margin: 5px;  
}
```

```
input[type=button].btn-primary {  
  background-color: rgb(128, 128, 255);  
  color: rgb(0, 0, 0);  
  border: solid black 0.5px;  
}
```

```
input[type=button].btn-primary:active {  
  background: rgb(192, 192, 192);  
  -webkit-box-shadow: inset 0px 0px 5px #c1c1c1;  
  -moz-box-shadow: inset 0px 0px 5px #c1c1c1;  
  box-shadow: inset 0px 0px 5px #c1c1c1;  
}
```

JavaScript Code:

```
// This function clears all the values
function clearScreen() {
    document.getElementById("result").value = "";
}

// This function displays the values
function display(value) {
    document.getElementById("result").value += value;
}

// This function evaluates the expression and returns the result
function calculate() {
    var p = document.getElementById("result").value;
    var q = eval(p);
    document.getElementById("result").value = q;
}

function clearScreen() {
    document.getElementById("result").value = "";
}

function display(value) {
    document.getElementById("result").value += value;
}

function calculate() {
    var p = document.getElementById("result").value;
    var q = eval(p);
    document.getElementById("result").value = q;
}
```