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| **Name :Mohammed Noman** | **Sub** | **: Sem-II** |
| **Roll No : 270** | **Practical** | **: 03** |

Aim: Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.

Code (Html):

<!DOCTYPE html>

<html>

<head>

<title>Calculator</title>

<meta charset="utf-8"/>

<link rel="stylesheet" href="design.css"/>

<script src="logic.js"></script>

</head>

<body>

<div class="container">

<div class="head">CALCULATOR</div>

<div class="screen">

<div id="numdisplay"><span>0</span></div>

</div>

<div class="specialbuttons">

<input type="button" name="reset" value="Reset" onclick="sperform(this.name)"/>

<input type="button" name="bs" value="Backspace" onclick="sperform(this.name)"/>

</div>

<div class="keypad">

<input type="button" name="1" value="1" onclick="perform(this.name)"/>

<input type="button" name="2" value="2" onclick="perform(this.name)"/>

<input type="button" name="3" value="3" onclick="perform(this.name)"/>

<input type="button" name="+" value="+" onclick="perform(this.name)"/>

<input type="button" name="4" value="4" onclick="perform(this.name)"/>

<input type="button" name="5" value="5" onclick="perform(this.name)"/>

<input type="button" name="6" value="6" onclick="perform(this.name)"/>

<input type="button" name="-" value="-" onclick="perform(this.name)"/>

<input type="button" name="7" value="7" onclick="perform(this.name)"/>

<input type="button" name="8" value="8" onclick="perform(this.name)"/>

<input type="button" name="9" value="9" onclick="perform(this.name)"/>

<input type="button" name="\*" value="\*" onclick="perform(this.name)"/>

<input type="button" name="." value="." onclick="perform(this.name)"/>

<input type="button" name="0" value="0" onclick="perform(this.name)"/>

<input type="button" name="=" value="=" onclick="perform(this.name)"/>

<input type="button" name="/" value="/" onclick="perform(this.name)"/>

</div>

</div>

</body>

</html>

# Code (CSS):

\*{

margin: 0px; padding: 0px;

}

body{

background-image:url(bg.jpg); background-size: cover; background-attachment: fixed;

}

.head{

width: 300px; text-align: center;

font: bold normal 18px Arial; margin: 0px auto;

}

.container{ height: 406px; width: 350px;

margin: 40px auto; background-color: #474473; border: 3px inset #eac595; border-radius: 17px; padding: 40px 30px;

justify-content: center;

#numdisplay{ height: 42px; text-align: right;

font: normal normal 43px Arial;

}

#numdisplay span{ opacity: 0.5;

}

.keypad { width: 290px;

height: 206px;

border: 1px dotted #27b04a; border-radius: 14px; margin: 14px;

padding: 12px;

}

input{

height: 47px; width: 65px; margin: 2px; padding: 4px;

border-radius: 10px;

font: bold normal 30px Verdana;

}

input:hover{

background-color: silver;

}

.screen{

height: 50px; width: 300px; margin: 10px;

padding: 16px 10px; border: 1px solid #283d6d; border-radius: 11px;

background-color: antiquewhite;

}

}

.specialbuttons{ height: 50px; width: 300px; margin: 0px auto;

}

.specialbuttons input{ width: 143px;

font-size: 20px;

}

# Code (JAVASCRIPT):

//functioning of backspace

//limit the number of digits and decimal places

//variables needed var a="",b=""; var sign="";

//performs the actual function function operate()

{

switch(sign)

{

case '+':

a=String(Number(a)+Number(b)) document.getElementById('numdisplay').innerHTML=a; b="";sign="";

break; case '-':

a=String(Number(a)-Number(b)) document.getElementById('numdisplay').innerHTML=a; b="";sign="";

break; case '\*':

a=String(Number(a)\*Number(b)) document.getElementById('numdisplay').innerHTML=a; b="";sign="";

break; case '/':

if(b=='0')

{

document.getElementById('numdisplay').innerHTML="Cannot divide by zero!"; a="";b="";c="";

break;

}

else

{

a=String(Number(a)/Number(b)) document.getElementById('numdisplay').innerHTML=a; b="";sign="";

break;

}

}

}

//triggered when a button is pressed function perform(m)

{

//checks for = if(m=="=")

{

if((a!="")&(b!=""))

{

operate();

}

}

//checks for signs

else if((m=="+")||(m=="-")||(m=="\*")||(m=="/"))

{

if((a!="")&&(b==""))

{

sign=m; document.getElementById('numdisplay').innerHTML=a+sign;

}

else if((a!="")&&(b!=""))

{

operate(); sign=m;

document.getElementById('numdisplay').innerHTML=a+sign;

}

}

//checks for numbers and decimals else

{

if(sign=="")

{

a=a+m; document.getElementById('numdisplay').innerHTML=a;

}

else

{

b=b+m; document.getElementById('numdisplay').innerHTML=a+sign+b;

}

}

}

//function for special buttons function sperform(m)

{

switch(m)

{

case 'reset': location.reload(); break;

case 'bs': if((a!="")&&(sign!=""))

{

if(b=="")

{

sign=""; document.getElementById('numdisplay').innerHTML=a;

}

else//b has some value

{

var bx= new Array(); bx=b.split(""); bx.pop(); b=bx.join("");

document.getElementById('numdisplay').innerHTML=a+sign+b;

}

}

else if((a!="")&&(sign==""))

{

var ax=new Array(); ax=a.split(""); ax.pop(); a=ax.join("");

document.getElementById("numdisplay").innerHTML=a;

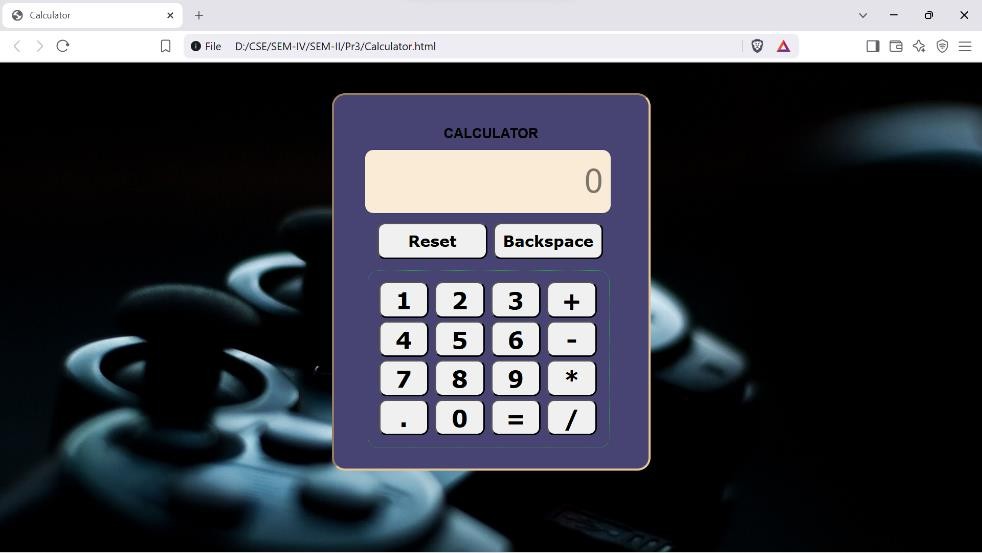
}

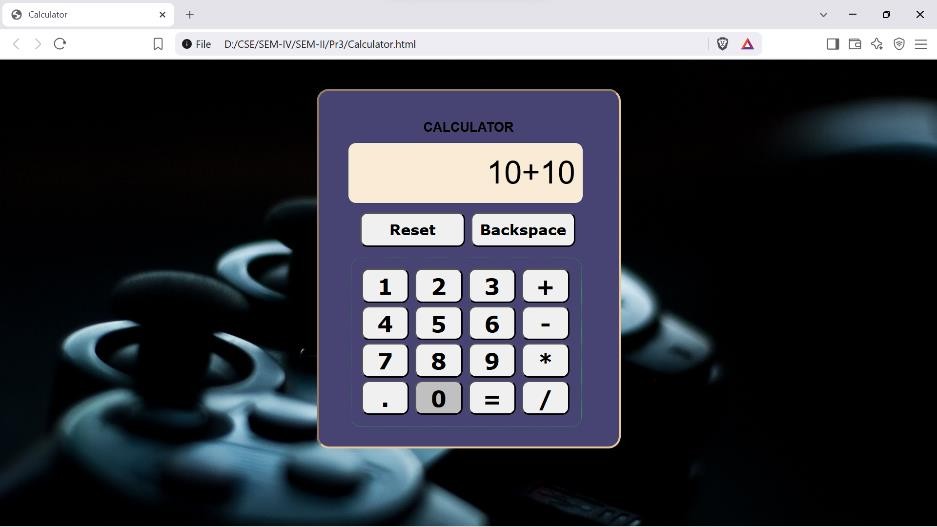
break;

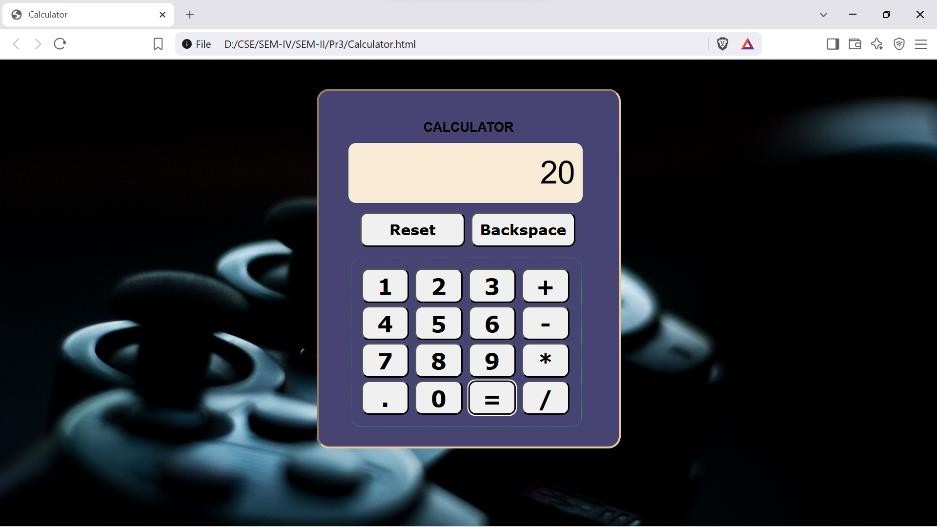
}

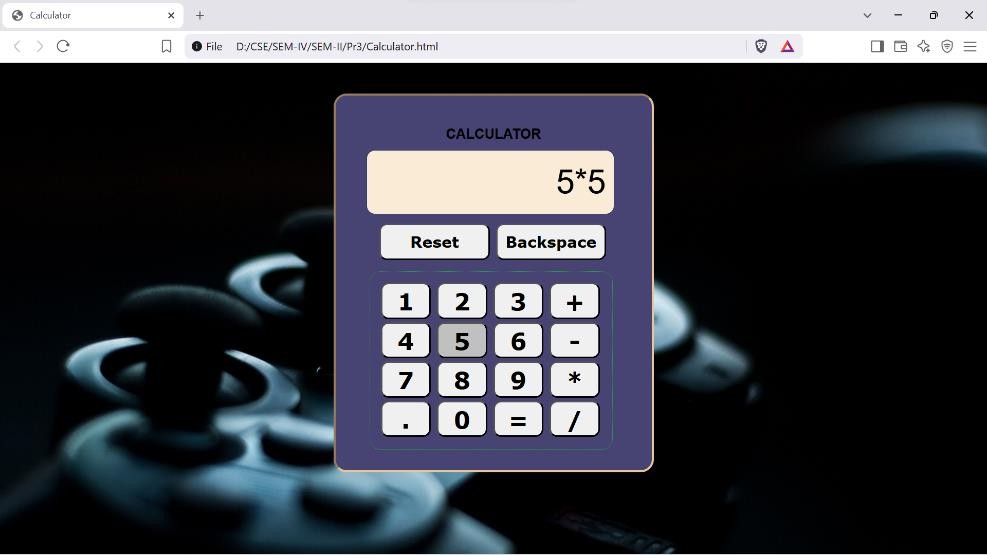
}

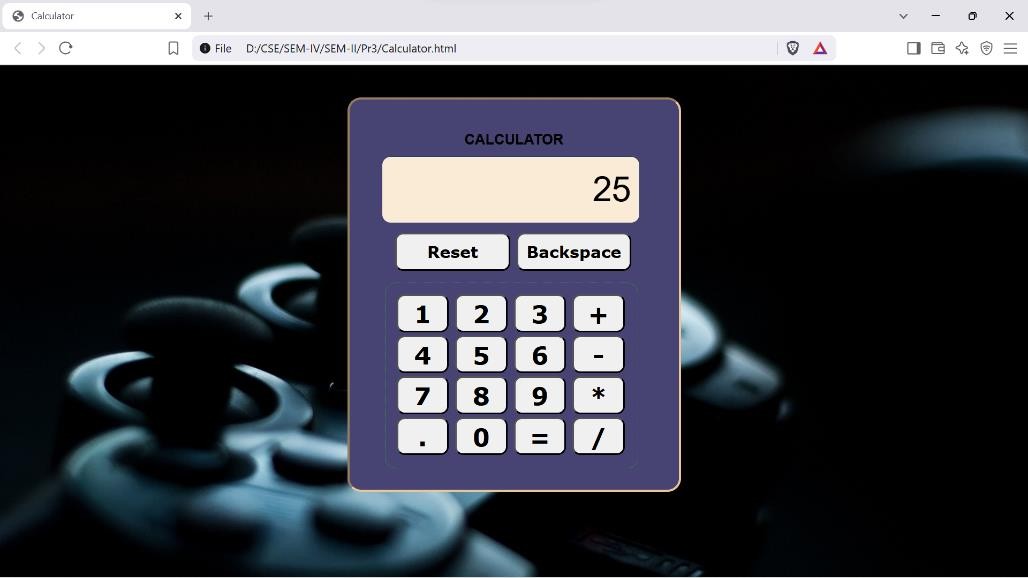
**OUTPUT:**

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