

Scripting Language Lab

Submitted by:

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Sec: C

Question:

Create a calculator app using Angular which is capable of performing following operations:

1. Addition of two numbers
2. Subtraction of two numbers
3. Multiplication of two numbers
4. Division of two numbers
5. Factorial of a number
6. Checking if a given number is Prime or not

SOLUTION:

Calculator component.css

```
*{
  margin: 0;
  padding: 0;
  font-family: "Times New Roman", Times, serif;
}

body{

  display: flex;
  justify-content: center;
  align-items: center;
}

.calculator{

position: relative;

display: grid;

}

.calculator .val{

grid-column: span 4; height: 100px; width: 320px;

background-color: #a1a1a1f1; border: none;

border-radius: 10px; text-align: right; font-size: 35px; padding: 10px;
color: rgb(107, 100, 100);

font-family: "Times New Roman", Times, serif; outline: none;

}
```

```
.calculator span{  
  
  display: grid;  
  
  width: 80px;  
  
  height: 80px;  
  
  place-items: center;  
  
  background-color: rgb(99, 89, 89);  
  
  color: rgb(20, 20, 20); font-size: 25px; margin: 2px;  
  
  border-radius : 90px;  
  }
```

```
.calculator span.clear{  
  
  grid-column: span 3;  
  
  width: 250px;  
  
  background-color: #1d5553;  
  
  }
```

```
.calculator span:hover{  
  
  background: #1d5553;  
  
  box-shadow: -5px 2px 2px rgba(0, 0, 0, 0.2);  
  
  }
```

```
.calculator span:active{  
  
  background: rgb(68, 124, 126);  
  
}
```

```
.calculator span.btm{  
  
  grid-column: span 2;  
  
  width: 160px;  
  
  background-color: #1d5553;  
  
  align-self: center;  
  
}
```

```
.btm{  
  
  display: grid;  
  
  width: 80px;  
  
  height: 80px;  
  
  place-items: center;  
  
  background-color: rgb(233, 233, 233);  
  
  color: rgba(0, 0, 0, 0.363);  
  
  font-size: 25px;  
  
  margin: 2px;  
  
  border-radius : 90px;  
  
  grid-column: span 2;
```

```
width: 160px;
```

```
background-color: #1d5553;
```

```
align-self: center;
```

```
border: none;
```

```
}
```

```
.btm:active{
```

```
background: rgb(25, 50, 51);
```

```
}
```

```
.btm:hover{
```

```
background: #1d5553;
```

```
box-shadow: -5px 2px 2px rgba(0, 0, 0, 0.2);
```

```
}
```

```
p{
```

```
display: grid;
```

```
place-items: center;
```

```
background-color: rgb(178, 203, 209);
```

```
color: rgba(0, 0, 0, 0); font-size: 25px; margin: 2px;
```

```
grid-column: span 4;
```

```
}
```

Calculator component.html

```
<body>

<div class="wrapper">

<form class="calculator" name="calc">

<input type="text" class="val" name="txt" readonly="" />

<span class="clear" onclick="document.calc.txt.value ="">AC</span>

<span class="num" onclick="document.calc.txt.value += '/'">/</span>

<span class="num" onclick="document.calc.txt.value += '7'">7</span>

<span class="num" onclick="document.calc.txt.value += '8'">8</span>

<span class="num" onclick="document.calc.txt.value += '9'">9</span>

<span class="num" onclick="document.calc.txt.value += '*'>x</span>

<span class="num" onclick="document.calc.txt.value += '4'">4</span>

<span class="num" onclick="document.calc.txt.value += '5'">5</span>

<span class="num" onclick="document.calc.txt.value += '6'">6</span>

<span class="num" onclick="document.calc.txt.value += '-'>-</span>

<span class="num" onclick="document.calc.txt.value += '1'">1</span>

<span class="num" onclick="document.calc.txt.value += '2'">2</span>

<span class="num" onclick="document.calc.txt.value += '3'">3</span>
```

```
<span class="num" onclick="document.calc.txt.value += '+'>+</span>
```

```
<span class="num" onclick="document.calc.txt.value += '.'>.</span>
```

```
<span class="num" onclick="document.calc.txt.value += '0'">0</span>
```

```
<span class="num" onclick="document.calc.txt.value +=  
'00'">00</span>
```

```
<span class="equal" onclick="document.calc.txt.value =  
eval(calc.txt.value)">=</span>
```

```
<span class="btm" onclick="document.calc.txt.value =  
eval(calc.txt.value)">Factorial</span>
```

```
<button class="btm" (Click)="isPrime()">Prime</button><br>
```

```
<p>{{prime}} is {{result}}</p>
```

```
</form>
```

```
</div>
```

```
</body>
```

Calculator component.ts

```
import { Component } from '@angular/core';
```

```
@Component({
```

```
  selector: 'app-calculator',
```

```
templateUrl: './calculator.component.html', styleUrls:
```

```
 ['./calculator.component.css'],
```

```
  })
```

```
export class CalculatorComponent { result = ' not a prime number';
```

```
  prime = 0;
```

```
  count = 0;
```

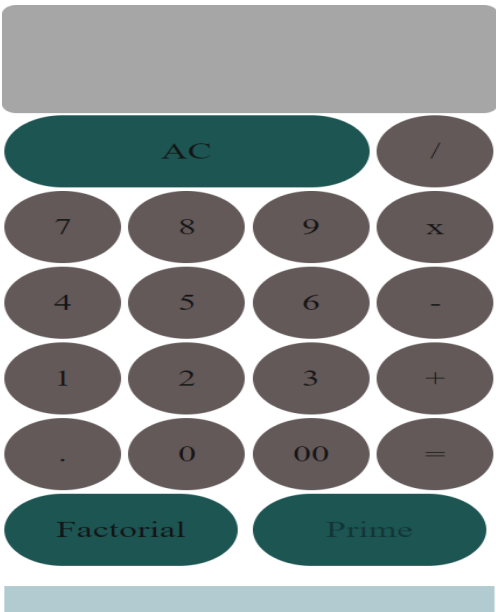
```
  i = 1;
```

```
  title = 'Calculator'; isPrime() { this.prime = 1; this.result = ' is a prime';
```

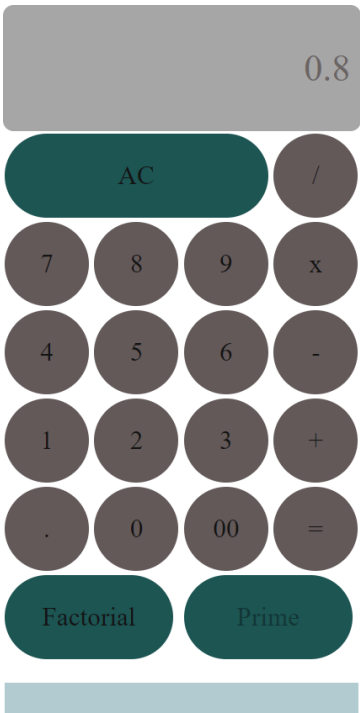
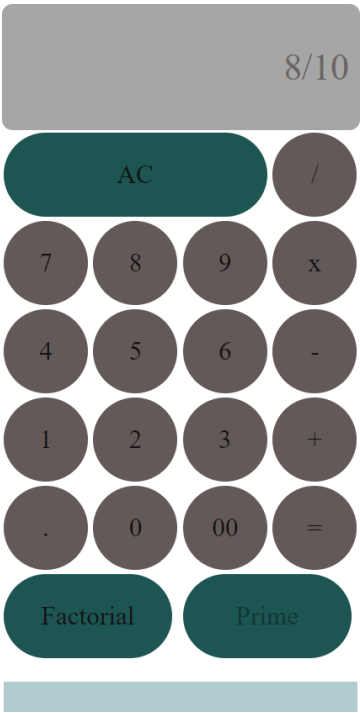
```
  }
```

```
}
```


OUTPUT:



Program output 1:



Program output 2:

