Moodle question for the week 20- 26 September

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

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SOLUTION :-

Calculator component.css

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

body{ disp
 lay: flex;
 justify-content: center;
```

```css
  align-items: center;

}


.calculator{ po

 sition:

 relative;

 display: grid;

}


.calculator .val{

 grid-column:

 span 4; height:

 100px; width:

 320px;

 background-color:

 #7c7878f1; border:

 none;

 border-radius:

 10px; text-align:

 right; font-size:

 35px; padding:

 10px; color:

 white;

 font-family:"Times New Roman",

 Times, serif; outline: none;

}


.calculator

 span{ displa

 y: grid;

 width: 80px;
```

height:

80px;

```css
    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: #39A6A3;
}


.calculator

 span:hover{ back

 ground: #39A6A3;

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


.calculator

 span:active{ backgroun

 d: rgb(68, 124, 126);
}


.calculator

 span.btm{  grid-
```

column: span 2;

width: 160px;

```css
  background-color:
  #39A6A3; 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:
  #39A6A3;    align-self:
  center;
  border: none;
 }


 .btm:active{
  background: rgb(25, 50, 51);
 }
```

```css
.btm:hover{ backg
round: #39A6A3;
```

```css
  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


```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>
```

```html
      <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="eq

       ual"

       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

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


@Component({
 selector: 'app-calculator',
```
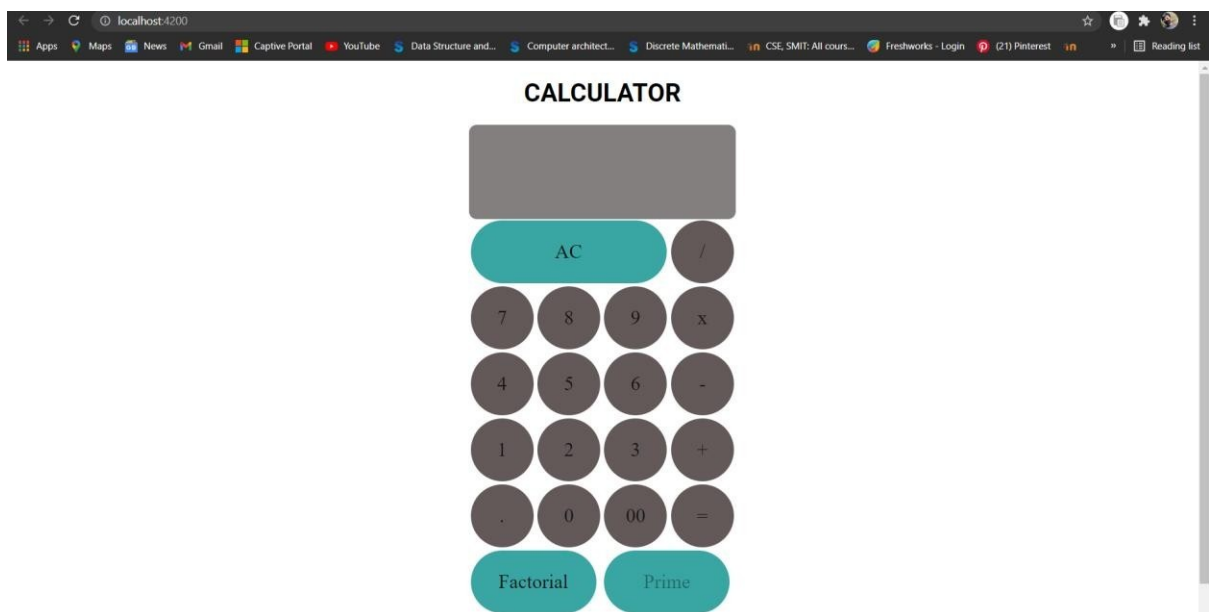
```
templateUrl:
'./calculator.component.html',
styleUrls:
['./calculator.component.css'],
})
export class
CalculatorComponent
{ result = ' not a prime
number'; prime = 0;
count = 0;
i = 1;
title =
'Calculator';
isPrime()
{ this.prime =
1;
 this.result = ' is a prime';
}
}
```
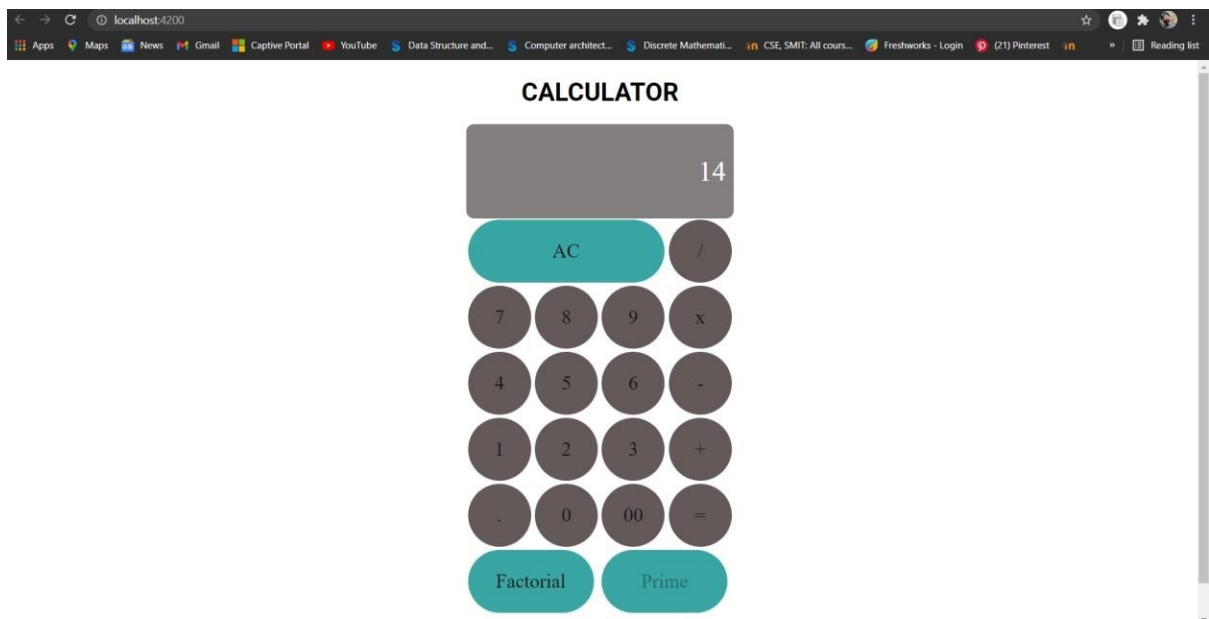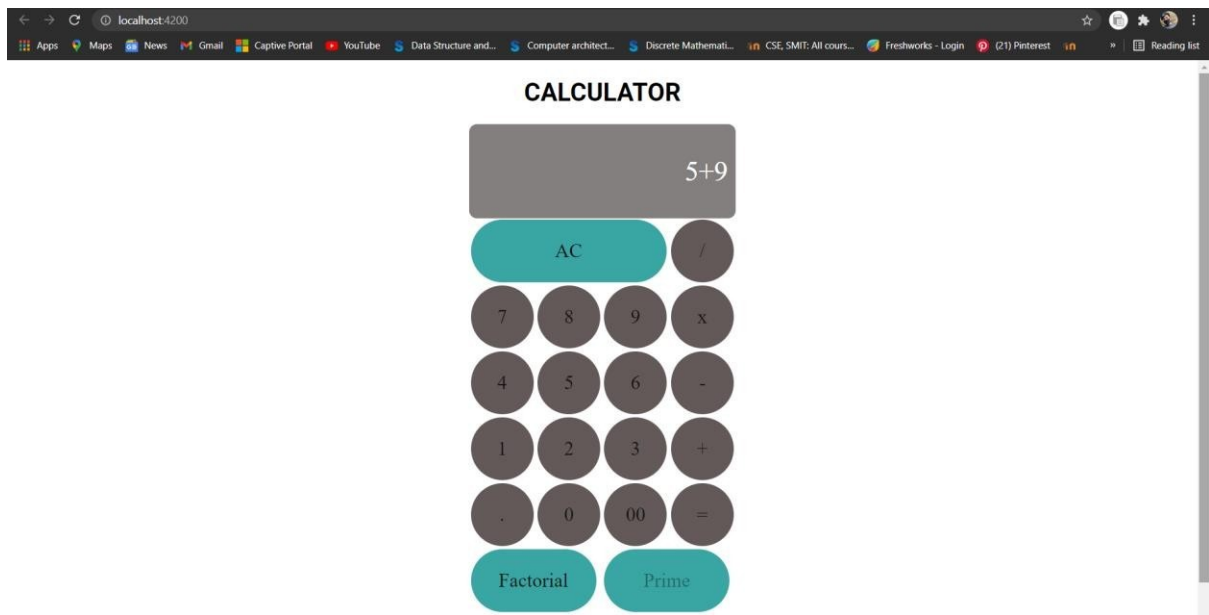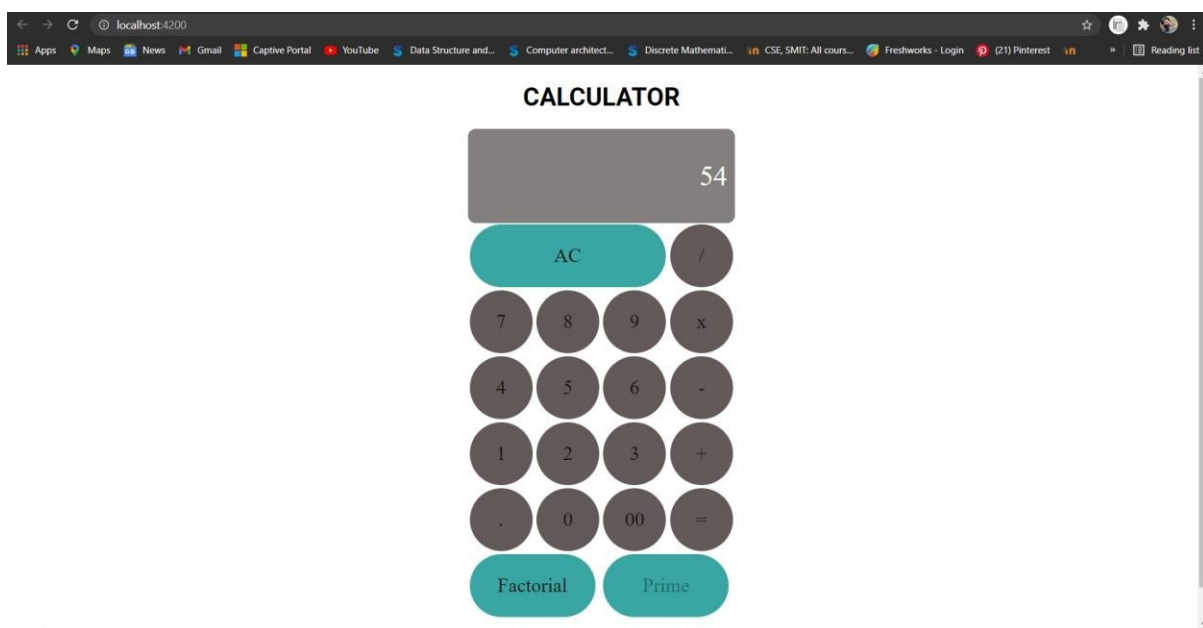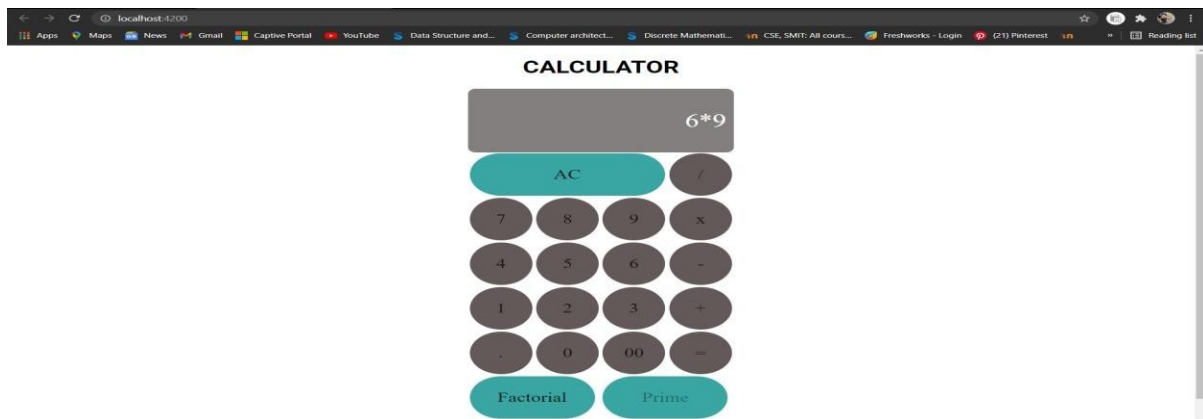
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OUTPUT SNIPPETS :-

Program output 1 :

Program output 2 :

Submitted by :
Name : Adrian Macilwaine

Registration   no.   :

201800012 **Section** : C

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