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

@Component({
  selector: 'ng-calculator',
  templateUrl: './calculator.component.html',
})
export class CalculatorComponent {

}
```

Template:

```
<div class="container-fluid">

  <div class="jumbotron col-sm-4 p-2 m-0 bg-inverse">

    <h1 class="text-center">Angular Calculator</h1>

    //Displays the User Input
    <div class="input-group input-group-sm col-sm-12 m-0 p-0">
      <div class="col-sm-12 form-control text-lg-right"
type="text">{{input}}</div>
    </div>

    //Displays the Results
    <div class="input-group input-group-sm col-sm-12 m-0 p-0">
      <div class="form-control text-sm-right"
type="text">{{result}}</div>
    </div>

    <div class="col-sm-12 p-1 m-0">
      <button class="btn btn-info col-sm-6"
type="button" (click)="allClear()">C</button>
      <button class="btn btn-warning col-sm-3"
type="button" (click)="clear()">x</button>
      <button class="btn btn-secondary col-sm-3"
type="button" (click)="pressOperator('/')">/</button>
    </div>

    <div class="col-sm-12 p-1 m-0">
      <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('7')">7</button>
```

```
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('8')">8</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('9')">9</button>
    <button class="btn btn-lg btn-secondary col-sm-3 p-1"
type="button" (click)="pressOperator('*')">X</button>
   </div>
   <div class="col-sm-12 p-1 m-0">
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('4')">4</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('5')">5</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('6')">6</button>
    <button class="btn btn-lg btn-secondary col-sm-3 p-1"
type="button" (click)="pressOperator('-')">-</button>
   </div>
   <div class="col-sm-12 p-1 m-0">
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('1')">1</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('2')">2</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('3')">3</button>
    <button class="btn btn-lg btn-secondary col-sm-3 p-1"
type="button" (click)="pressOperator('+')">+</button>
   </div>
   <div class="col-sm-12 p-1 m-0">
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('.')">.</button>
    <button class="btn btn-lg btn-outline-secondary col-sm-3 p-1"
type="button" (click)="pressNum('0')">0</button>
    <button class="btn btn-lg btn-success col-sm-6 p-1"
type="button" (click)="getAnswer()">=</button>
   </div>

 </div>
```

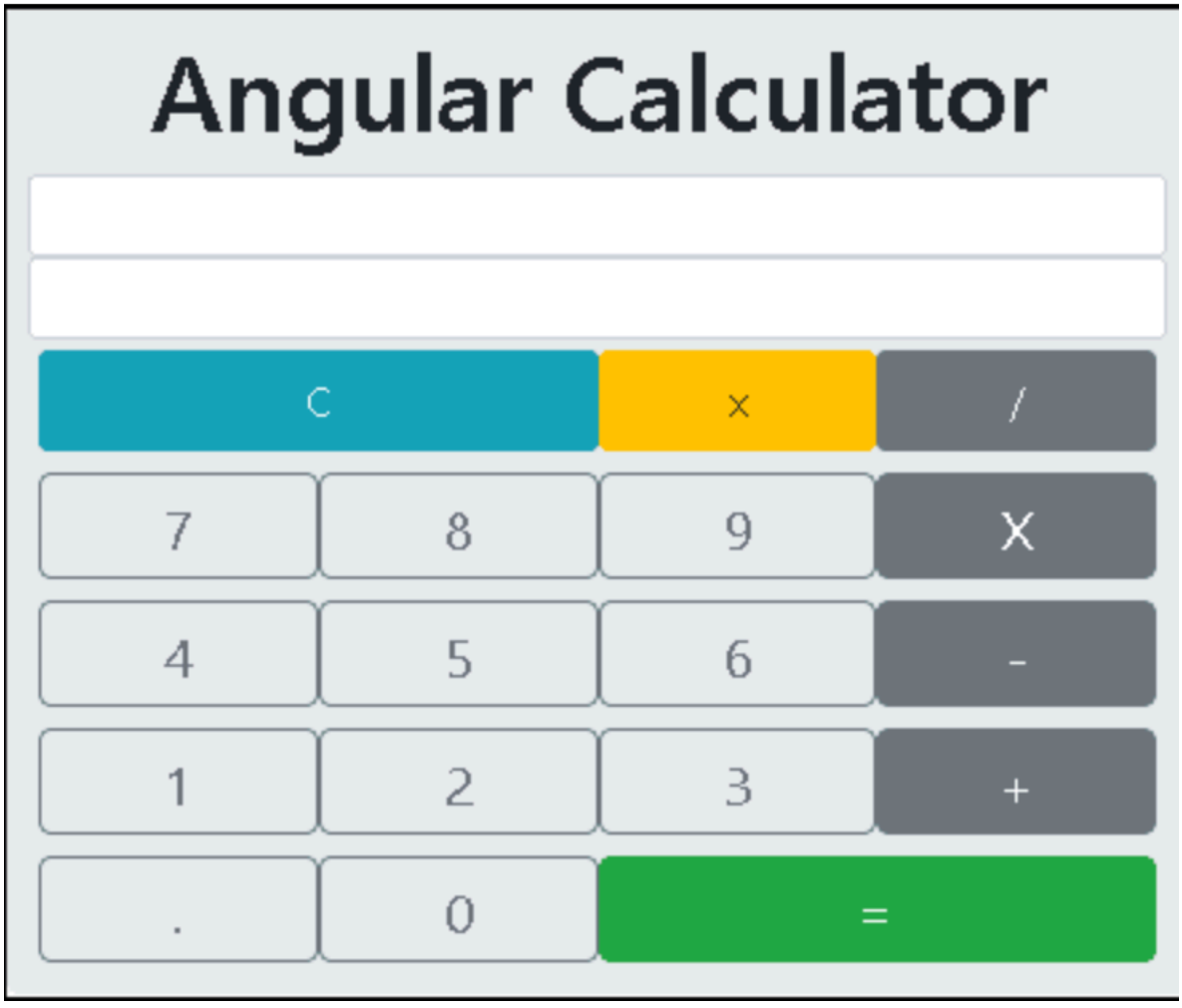
Calculator Logic:

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

```
@Component({
  selector: 'ng-calculator',
  templateUrl: './calculator.component.html',
})
export class CalculatorComponent {


  input:string = '';
  result:string = '';


  pressNum(num: string) {

    //Do Not Allow . more than once
    if (num==".") {
      if (this.input !="" ) {

        const lastNum=this.getLastOperand()
        console.log(lastNum.lastIndexOf("."))
        if (lastNum.lastIndexOf(".") >= 0) return;
      }
    }

    //Do Not Allow 0 at beginning.
    //Javascript will throw Octal literals are not allowed in strict
mode.
    if (num=="0") {
      if (this.input=="" ) {
        return;
      }
      const PrevKey = this.input[this.input.length - 1];
      if (PrevKey === '/' || PrevKey === '*' || PrevKey === '-' ||
PrevKey === '+')  {
          return;
      }
    }

    this.input = this.input + num
    this.calcAnswer();
  }
```

```
  getLastOperand() {
    let pos:number;
    console.log(this.input)
    pos=this.input.toString().lastIndexOf("+")
    if (this.input.toString().lastIndexOf("-") > pos)
pos=this.input.lastIndexOf("-")
    if (this.input.toString().lastIndexOf("*") > pos)
pos=this.input.lastIndexOf("*")
    if (this.input.toString().lastIndexOf("/") > pos)
pos=this.input.lastIndexOf("/")
    console.log('Last '+this.input.substr(pos+1))
    return this.input.substr(pos+1)
  }


  pressOperator(op: string) {

    //Do not allow operators more than once
    const lastKey = this.input[this.input.length - 1];
    if (lastKey === '/' || lastKey === '*' || lastKey === '-' ||
lastKey === '+')  {
      return;
    }

    this.input = this.input + op
    this.calcAnswer();
  }


  clear() {
    if (this.input !="" ) {
      this.input=this.input.substr(0, this.input.length-1)
    }
  }

  allClear() {
    this.result = '';
    this.input = '';
  }
```

```
 calcAnswer() {
   let formula = this.input;

   let lastKey = formula[formula.length - 1];

   if (lastKey === '.')  {
     formula=formula.substr(0,formula.length - 1);
   }

   lastKey = formula[formula.length - 1];

   if (lastKey === '/' || lastKey === '*' || lastKey === '-' ||
lastKey === '+' || lastKey === '.')  {
     formula=formula.substr(0,formula.length - 1);
   }

   console.log("Formula " +formula);
```




```
   this.result = eval(formula);
```

```
  }

  getAnswer() {
    this.calcAnswer();
    this.input = this.result;
    if (this.input=="0") this.input="";
  }

}
```

Screenshot: