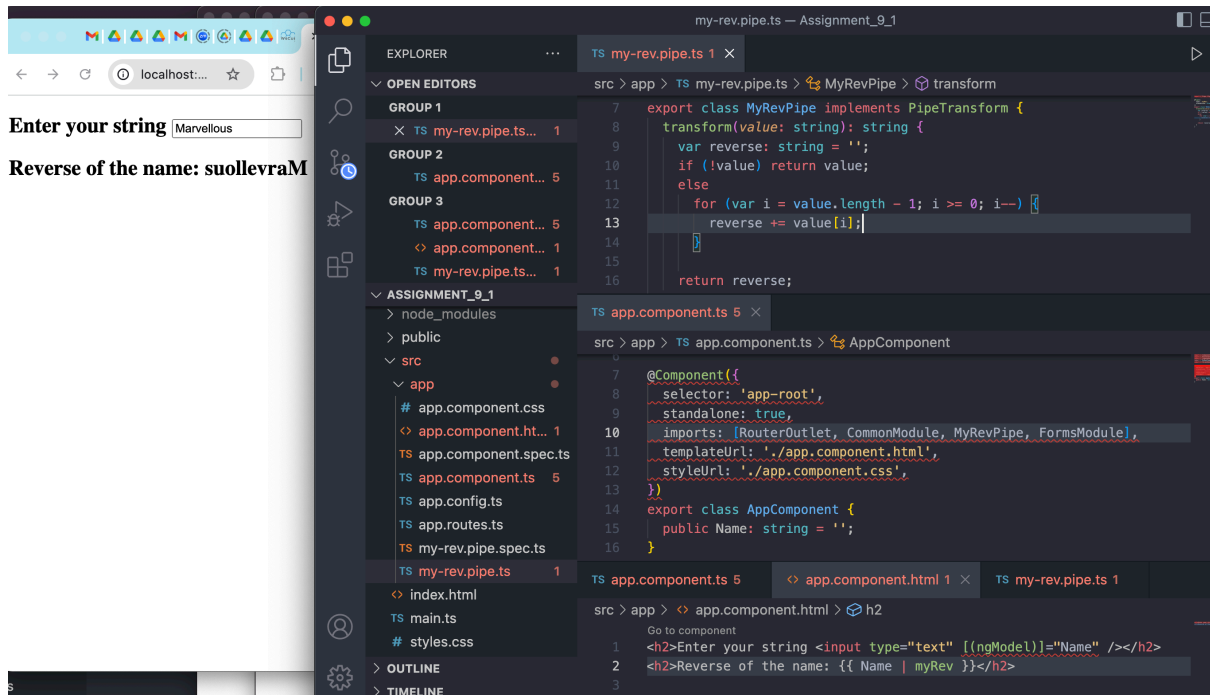


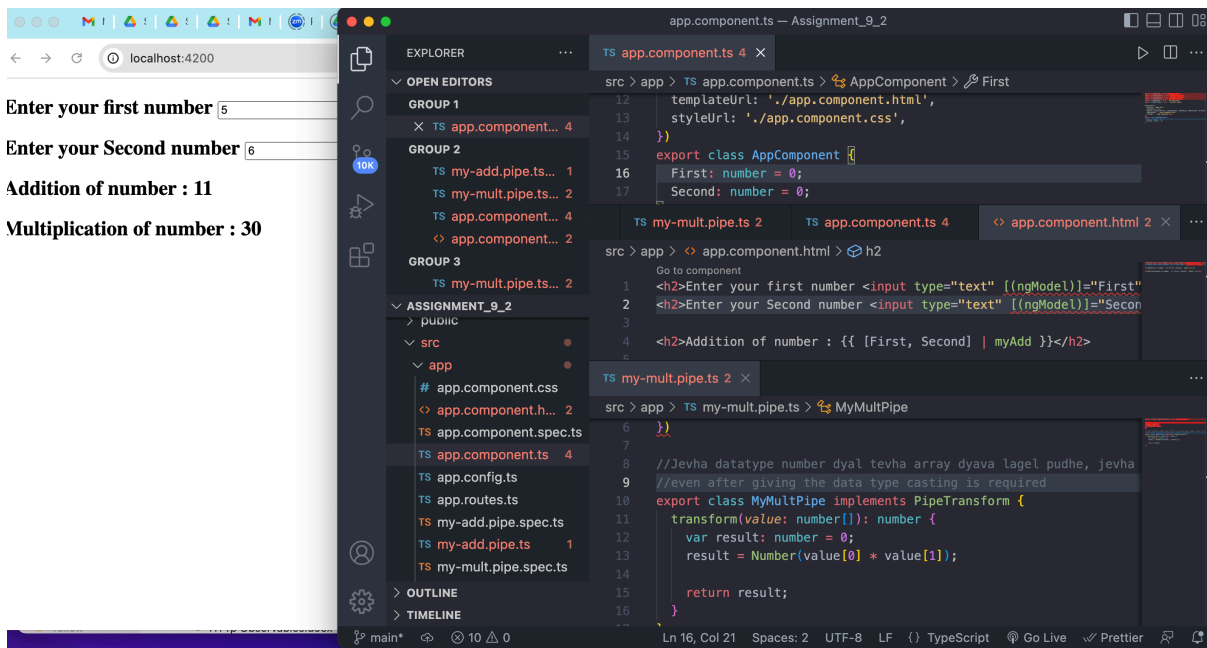
## Assignment 9

### Question 1:



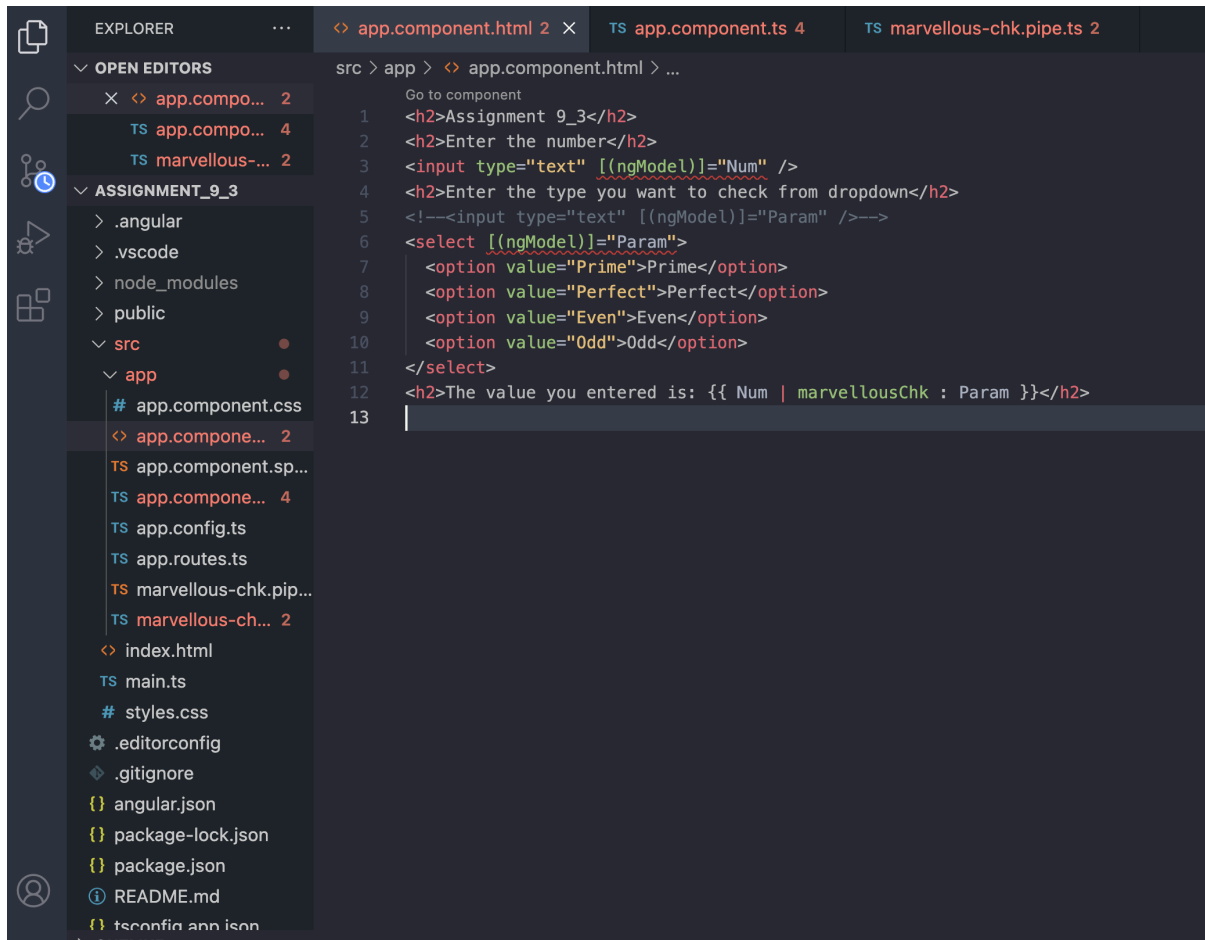
## Assignment 9

### Question 2:

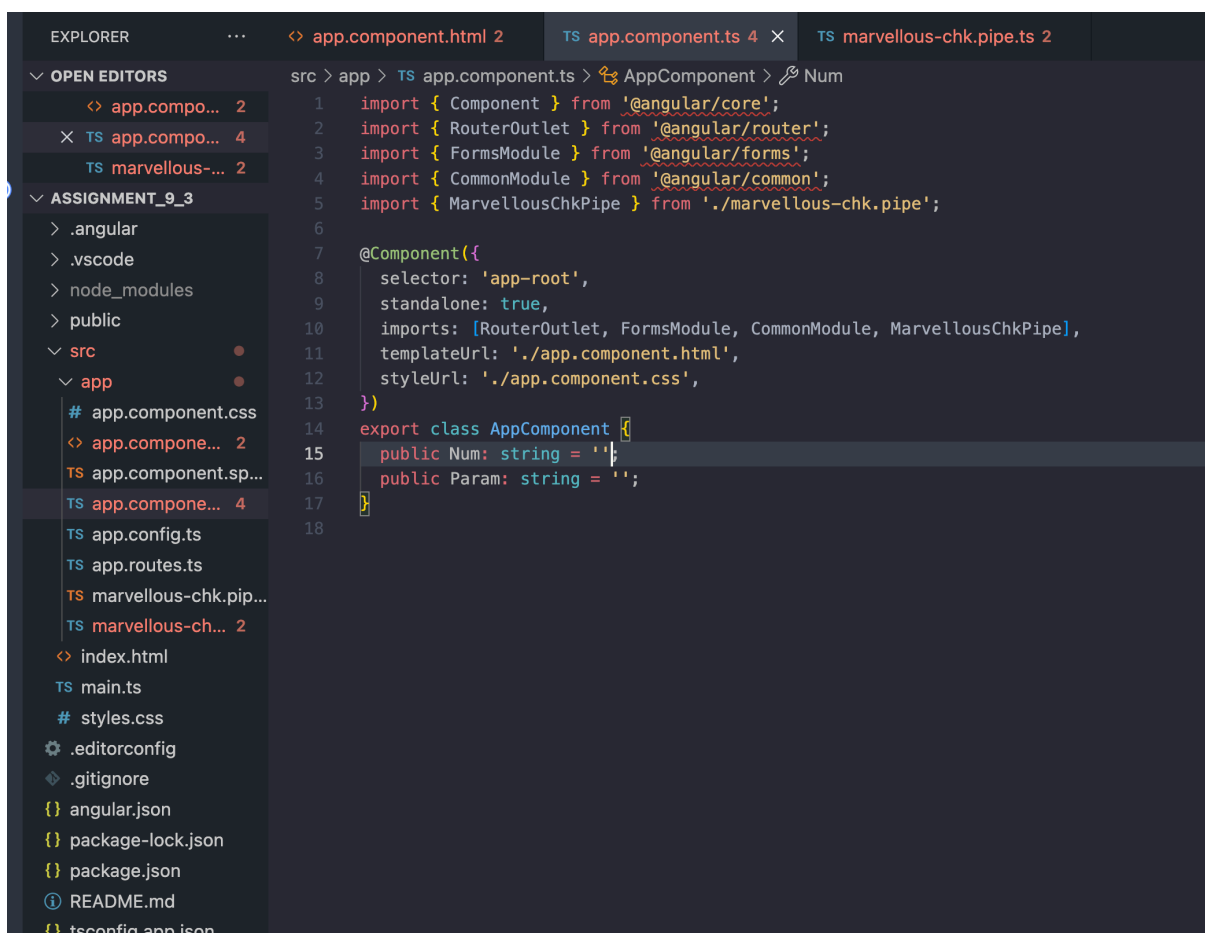


## Assignment 9

### Question 3:

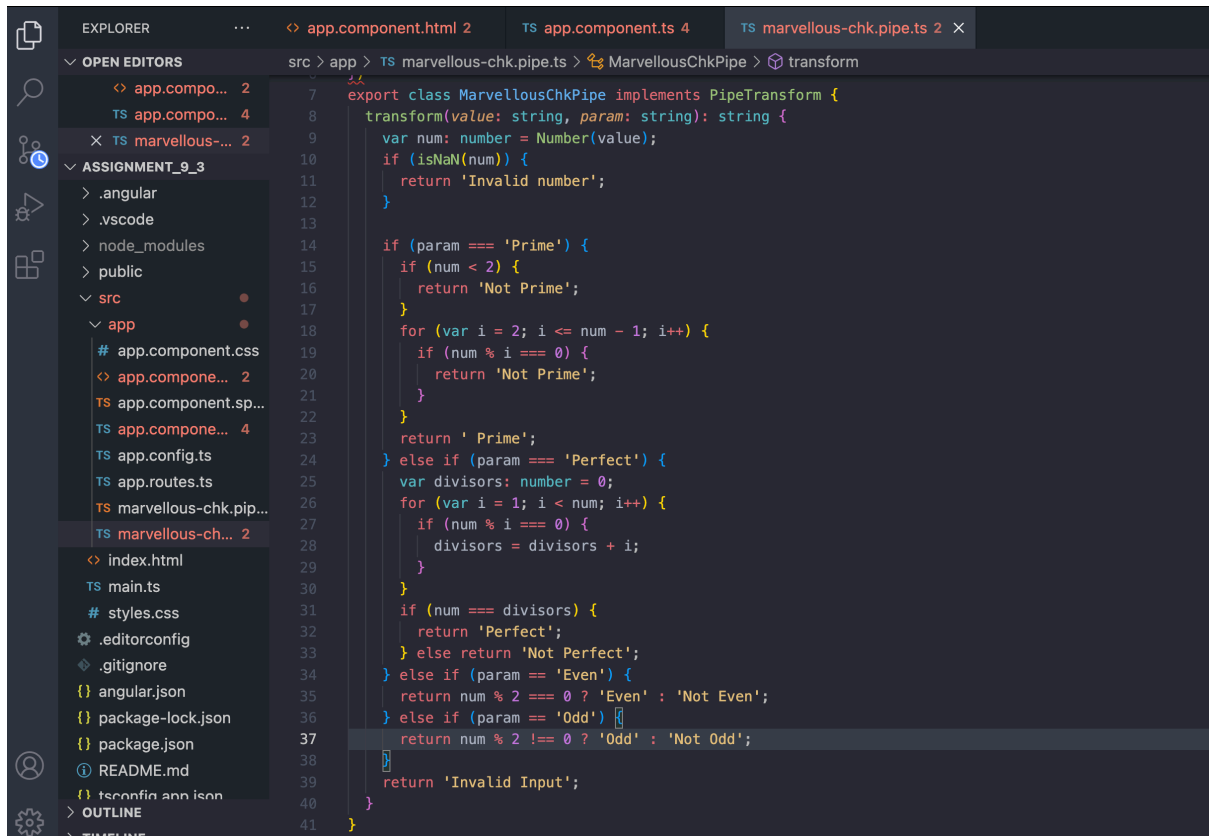


```
src > app > <> app.component.html > ...
Go to component
1 <h2>Assignment 9_3</h2>
2 <h2>Enter the number</h2>
3 <input type="text" [(ngModel)]="Num" />
4 <h2>Enter the type you want to check from dropdown</h2>
5 <!--<input type="text" [(ngModel)]="Param" />-->
6 <select [(ngModel)]="Param">
7   <option value="Prime">Prime</option>
8   <option value="Perfect">Perfect</option>
9   <option value="Even">Even</option>
10  <option value="Odd">Odd</option>
11 </select>
12 <h2>The value you entered is: {{ Num | marvellousChk : Param }}</h2>
13
```



```
src > app > TS app.component.ts > AppComponent > Num
1 import { Component } from '@angular/core';
2 import { RouterOutlet } from '@angular/router';
3 import { FormsModule } from '@angular/forms';
4 import { CommonModule } from '@angular/common';
5 import { MarvellousChkPipe } from './marvellous-chk.pipe';
6
7 @Component({
8   selector: 'app-root',
9   standalone: true,
10  imports: [RouterOutlet, FormsModule, CommonModule, MarvellousChkPipe],
11  templateUrl: './app.component.html',
12  styleUrls: ['./app.component.css'],
13 })
14 export class AppComponent {
15   public Num: string = '';
16   public Param: string = '';
17 }
18
```

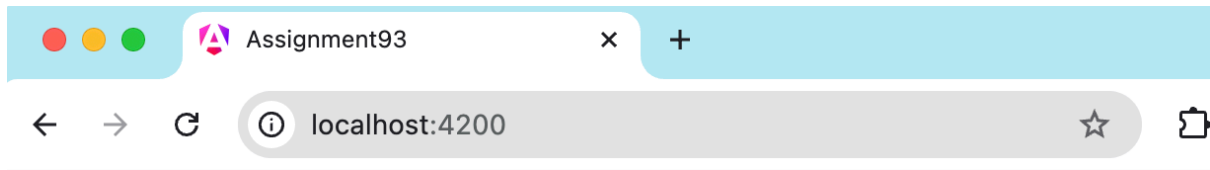
## Assignment 9



```
7 export class MarvellousChkPipe implements PipeTransform {
8   transform(value: string, param: string): string {
9     var num: number = Number(value);
10    if (isNaN(num)) {
11      return 'Invalid number';
12    }
13
14    if (param === 'Prime') {
15      if (num < 2) {
16        return 'Not Prime';
17      }
18      for (var i = 2; i <= num - 1; i++) {
19        if (num % i === 0) {
20          return 'Not Prime';
21        }
22      }
23      return ' Prime';
24    } else if (param === 'Perfect') {
25      var divisors: number = 0;
26      for (var i = 1; i < num; i++) {
27        if (num % i === 0) {
28          divisors = divisors + i;
29        }
30      }
31      if (num === divisors) {
32        return 'Perfect';
33      } else return 'Not Perfect';
34    } else if (param === 'Even') {
35      return num % 2 === 0 ? 'Even' : 'Not Even';
36    } else if (param === 'Odd') {
37      return num % 2 !== 0 ? 'Odd' : 'Not Odd';
38    }
39    return 'Invalid Input';
40  }
41 }
```

## Assignment 9

Output:

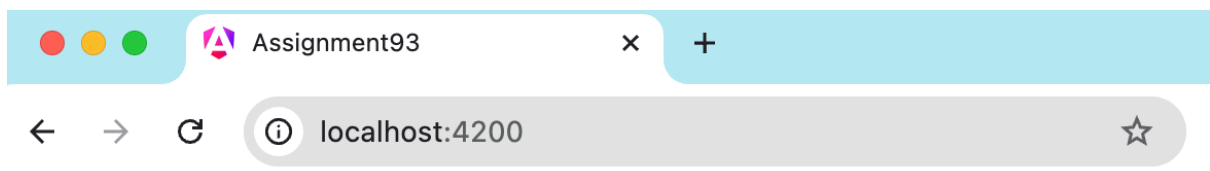


### Assignment 9\_3

**Enter the number**

**Enter the type you want to check from dropdown**

**The value you entered is: Invalid Input**



### Assignment 9\_3

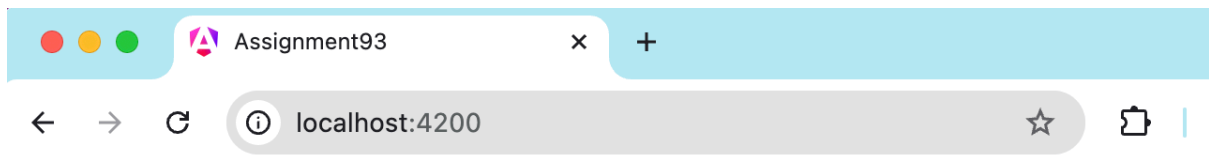
**Enter the number**

**Enter the type you want to check from dropdown**

**The value you entered is: Not Prime**

## Assignment 9

## Assignment 9

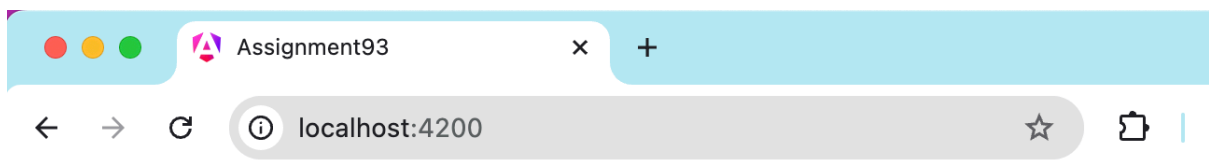


### Assignment 9\_3

**Enter the number**

**Enter the type you want to check from dropdown**

**The value you entered is: Perfect**



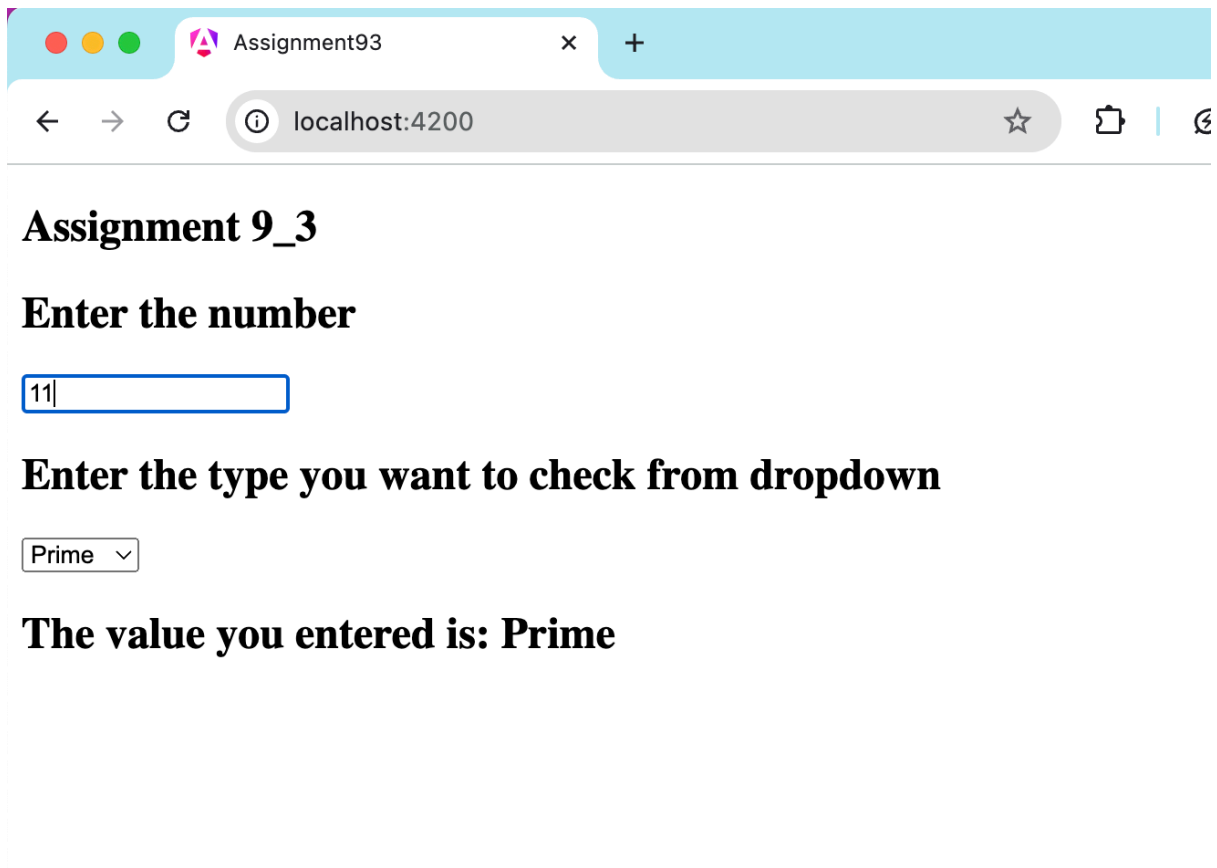
### Assignment 9\_3

**Enter the number**

**Enter the type you want to check from dropdown**

**The value you entered is: Even**

## Assignment 9



A screenshot of a web browser window. The title bar shows 'Assignment93' and a single tab. The address bar shows 'localhost:4200'. The page content includes the heading 'Assignment 9\_3', the instruction 'Enter the number', a text input field containing '11', the instruction 'Enter the type you want to check from dropdown', a dropdown menu showing 'Prime', and the output text 'The value you entered is: Prime'.

**Assignment 9\_3**

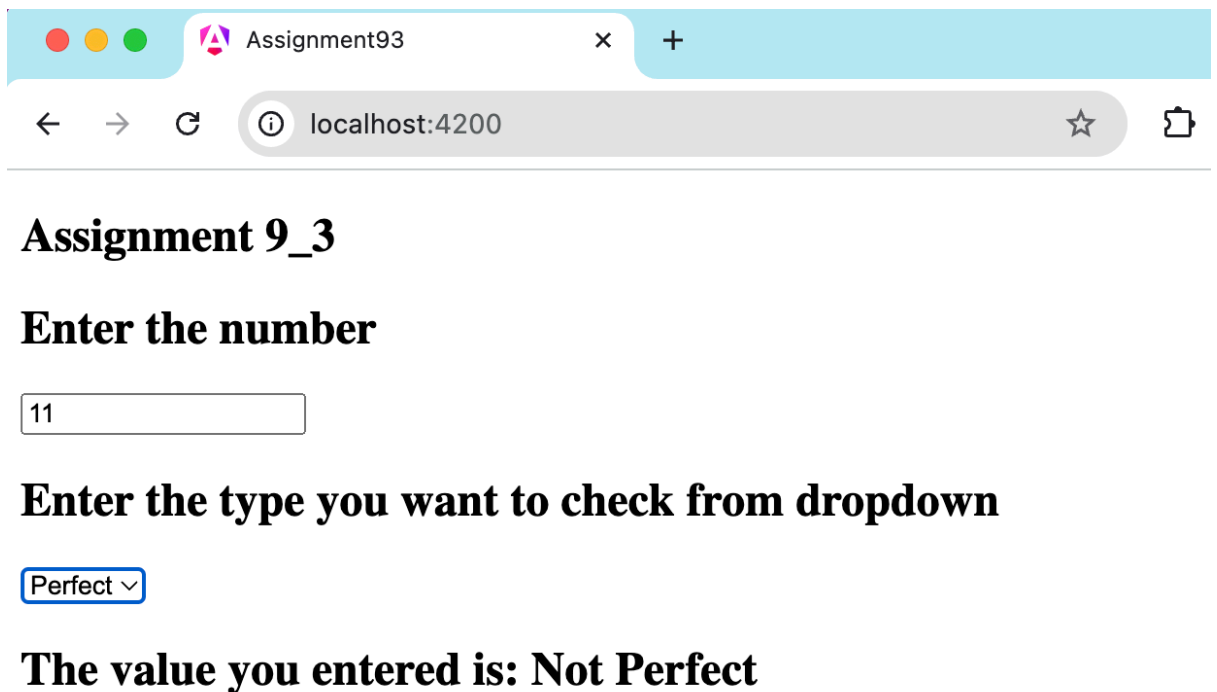
**Enter the number**

11

**Enter the type you want to check from dropdown**

Prime

**The value you entered is: Prime**



A screenshot of a web browser window, similar to the one above. The title bar shows 'Assignment93' and a single tab. The address bar shows 'localhost:4200'. The page content includes the heading 'Assignment 9\_3', the instruction 'Enter the number', a text input field containing '11', the instruction 'Enter the type you want to check from dropdown', a dropdown menu showing 'Perfect', and the output text 'The value you entered is: Not Perfect'.

**Assignment 9\_3**

**Enter the number**

11

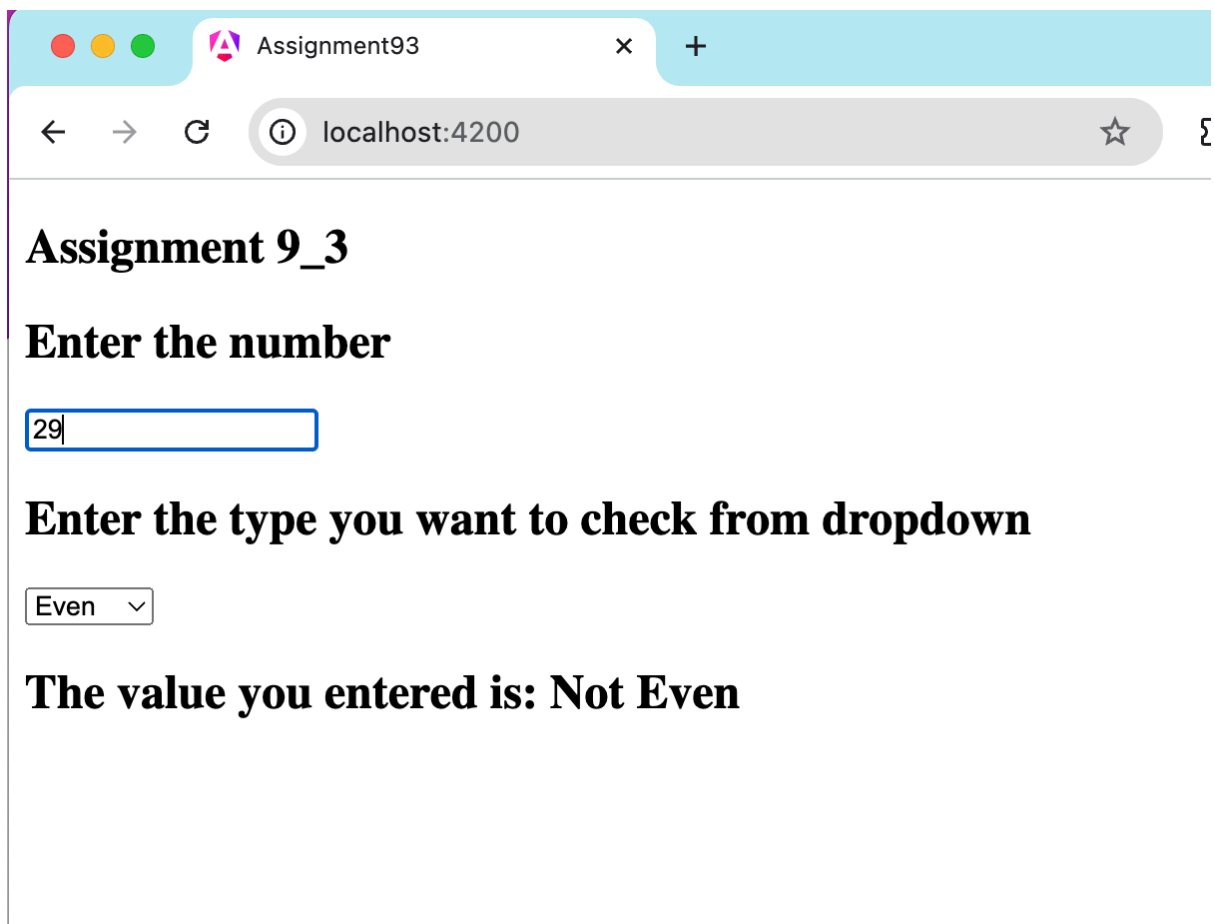
**Enter the type you want to check from dropdown**

Perfect

**The value you entered is: Not Perfect**



## Assignment 9



Assignment93

localhost:4200

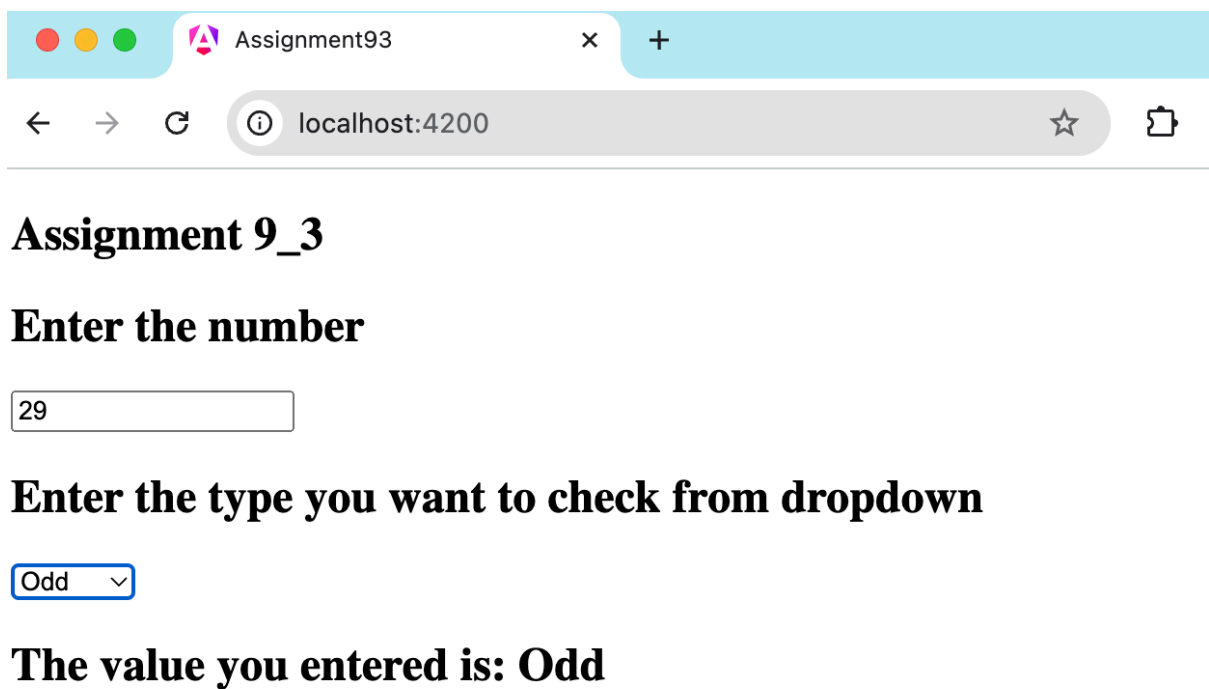
### Assignment 9\_3

**Enter the number**

**Enter the type you want to check from dropdown**

Even ▾

**The value you entered is: Not Even**



Assignment93

localhost:4200

### Assignment 9\_3

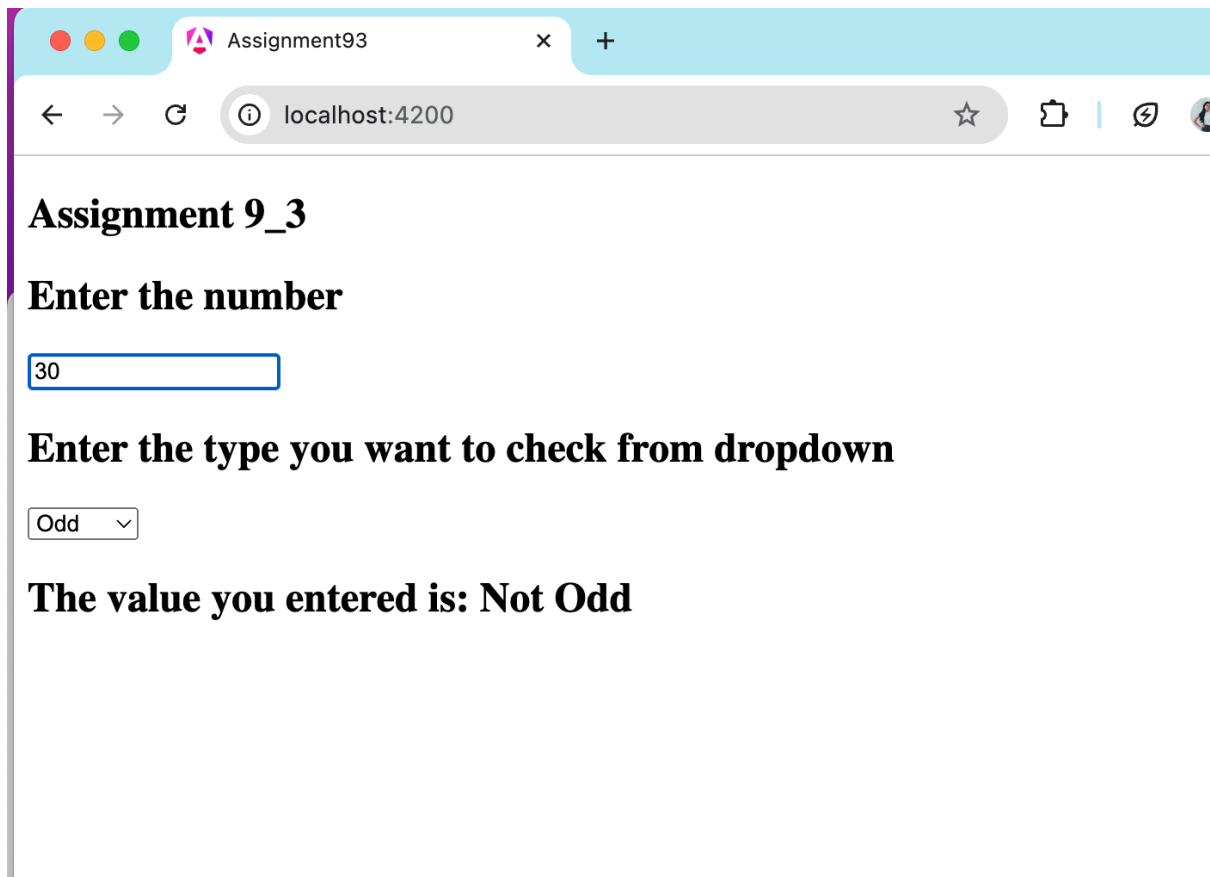
**Enter the number**

**Enter the type you want to check from dropdown**

Odd ▾

**The value you entered is: Odd**

## Assignment 9



**Assignment 9\_3**

**Enter the number**

**Enter the type you want to check from dropdown**

**The value you entered is: Not Odd**