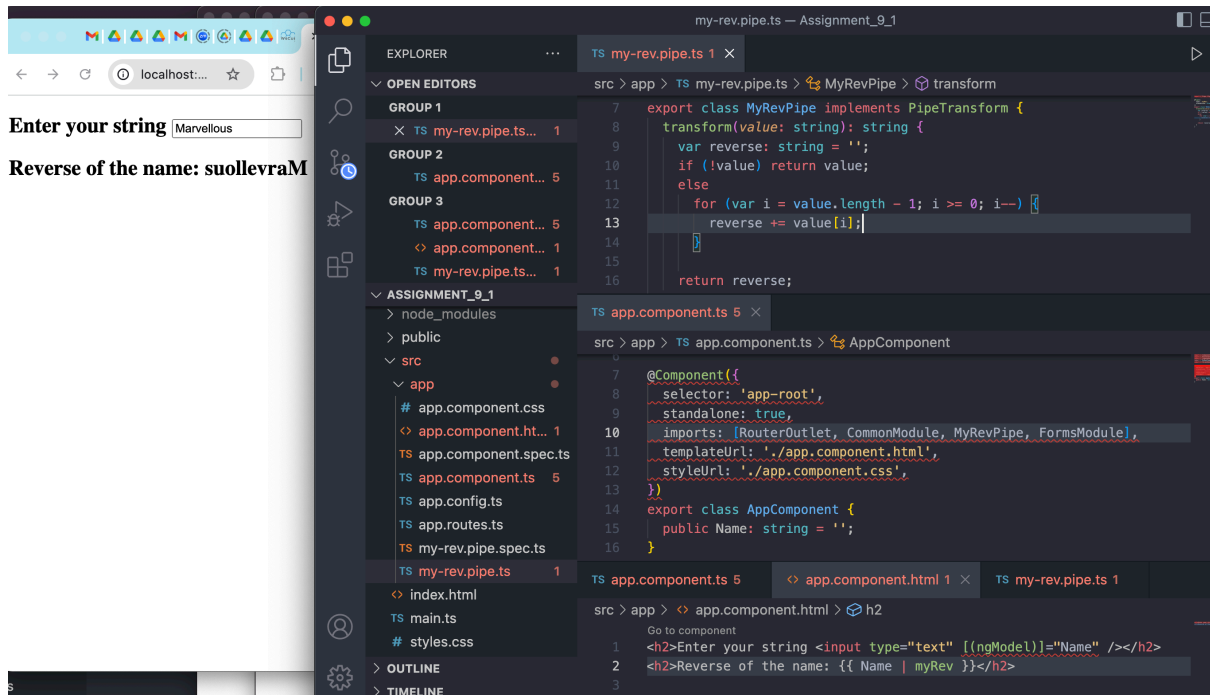


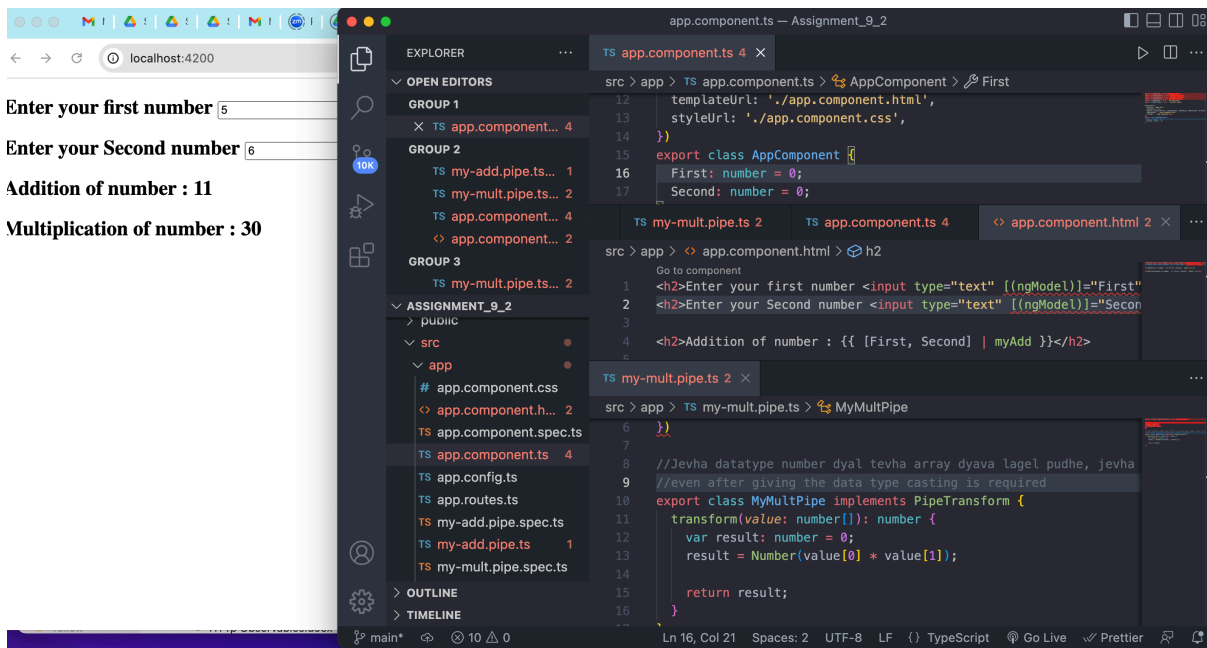
Assignment 9

Question 1:



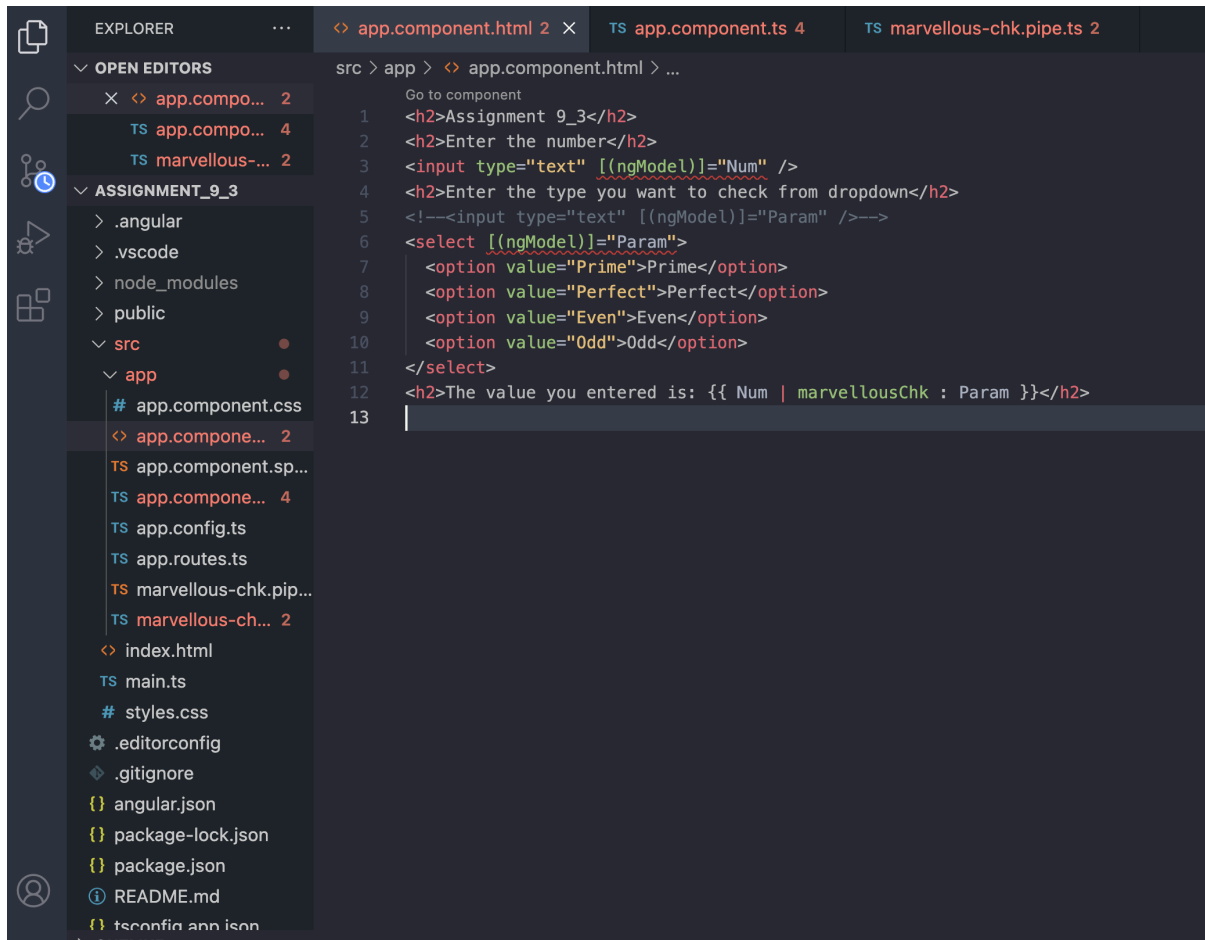
Assignment 9

Question 2:



Assignment 9

Question 3:

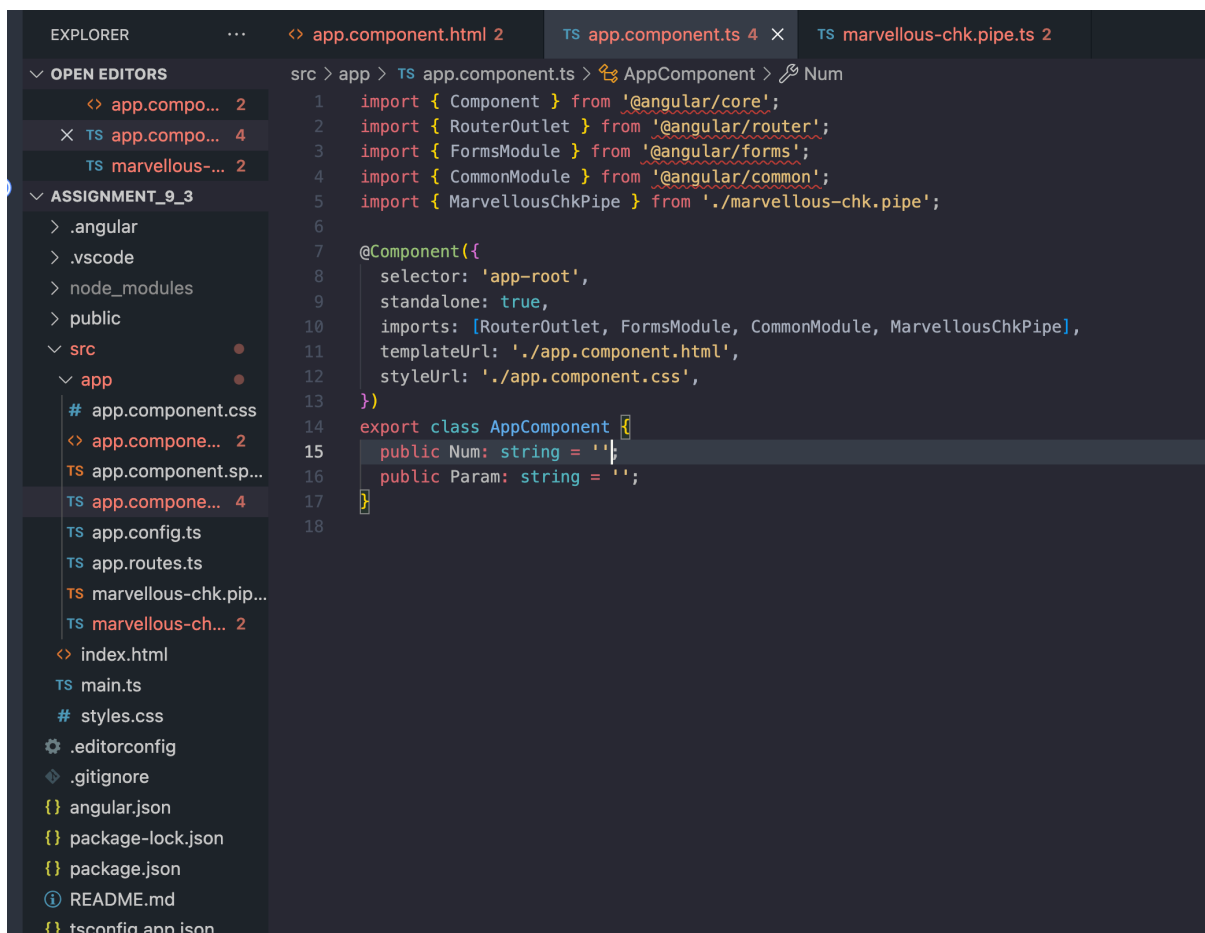


The screenshot shows the VS Code interface with the Explorer and Source Control views on the left. The Explorer view shows the project structure with the following files and folders:

- OPEN EDITORS
 - app.compo... 2
 - TS app.compo... 4
 - TS marvellous-... 2
- ASSIGNMENT_9_3
 - .angular
 - .vscode
 - node_modules
 - public
 - src
 - app
 - app.component.css
 - app.compone... 2
 - app.component.sp... 4
 - app.config.ts
 - app.routes.ts
 - marvellous-chk.pip...
 - marvellous-ch... 2
 - index.html
 - main.ts
 - styles.css
 - .editorconfig
 - .gitignore
 - angular.json
 - package-lock.json
 - package.json
 - README.md
 - tsconfig.app.json

The Source Control view shows the following changes:

- 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



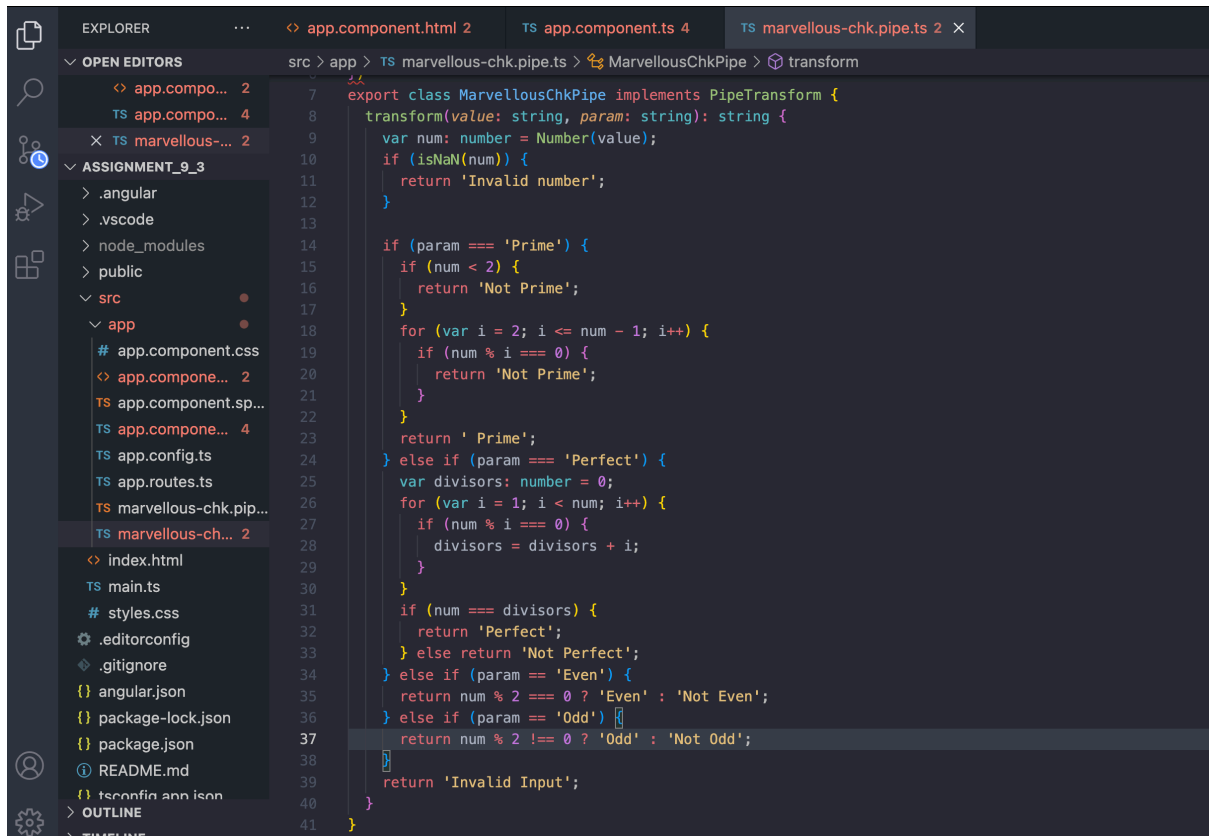
The screenshot shows the VS Code interface with the Explorer and Source Control views on the left. The Explorer view shows the project structure with the following files and folders:

- OPEN EDITORS
 - app.compo... 2
 - TS app.compo... 4
 - TS marvellous-... 2
- ASSIGNMENT_9_3
 - .angular
 - .vscode
 - node_modules
 - public
 - src
 - app
 - app.component.css
 - app.compone... 2
 - app.component.sp... 4
 - app.config.ts
 - app.routes.ts
 - marvellous-chk.pip...
 - marvellous-ch... 2
 - index.html
 - main.ts
 - styles.css
 - .editorconfig
 - .gitignore
 - angular.json
 - package-lock.json
 - package.json
 - README.md
 - tsconfig.app.json

The Source Control view shows the following changes:

- 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

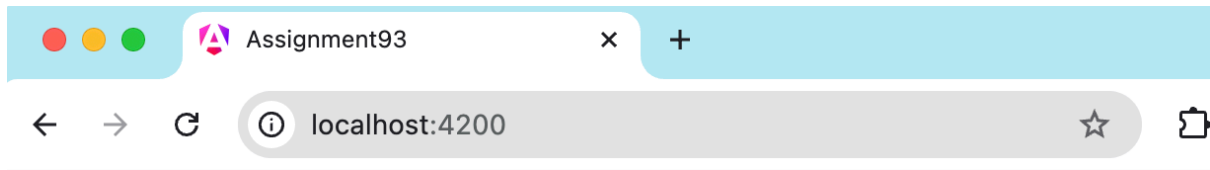
Assignment 9



```
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:

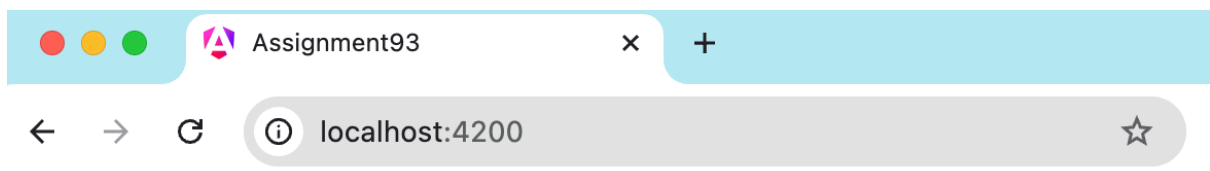


Assignment 9_3

Enter the number

Enter the type you want to check from dropdown

The value you entered is: Invalid Input



Assignment 9_3

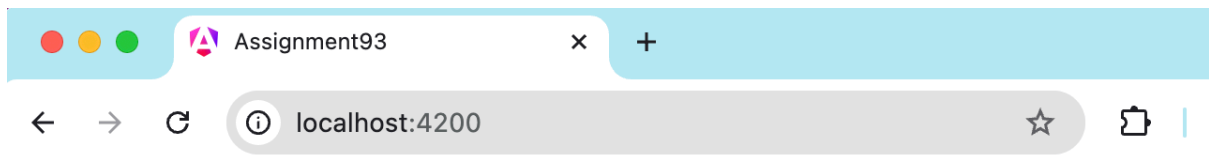
Enter the number

Enter the type you want to check from dropdown

The value you entered is: Not Prime

Assignment 9

Assignment 9

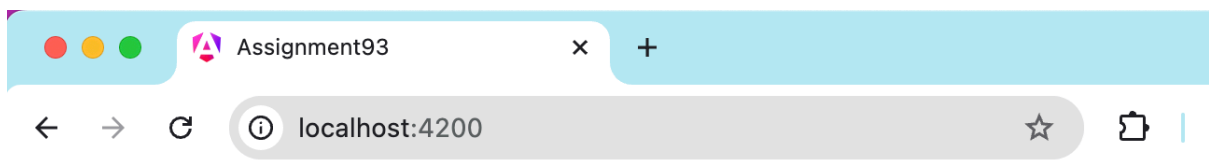


Assignment 9_3

Enter the number

Enter the type you want to check from dropdown

The value you entered is: Perfect



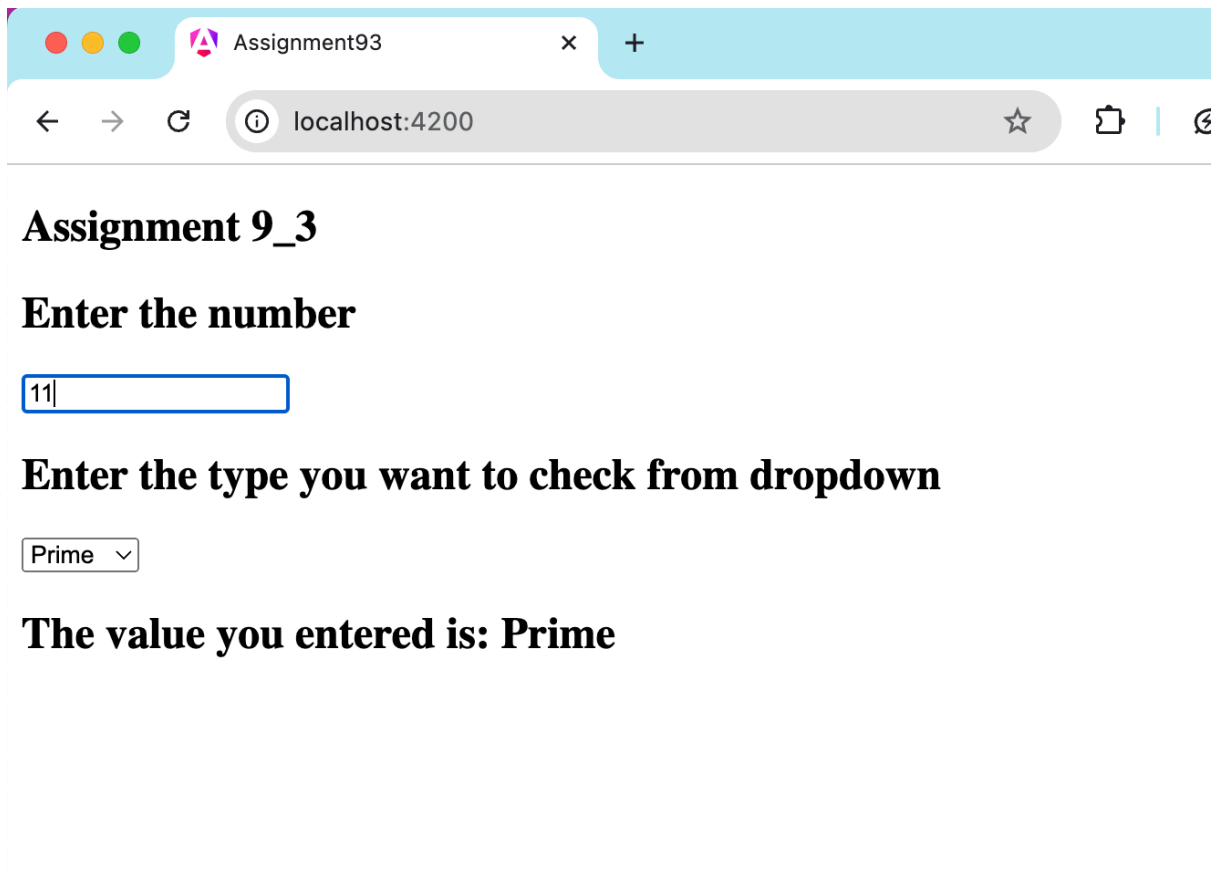
Assignment 9_3

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', followed by the instruction 'Enter the number'. Below this is a text input field containing the number '11'. The next instruction is 'Enter the type you want to check from dropdown', followed by a dropdown menu currently showing 'Prime'. The final line of text on the page is 'The value you entered is: Prime'.

Assignment 9_3

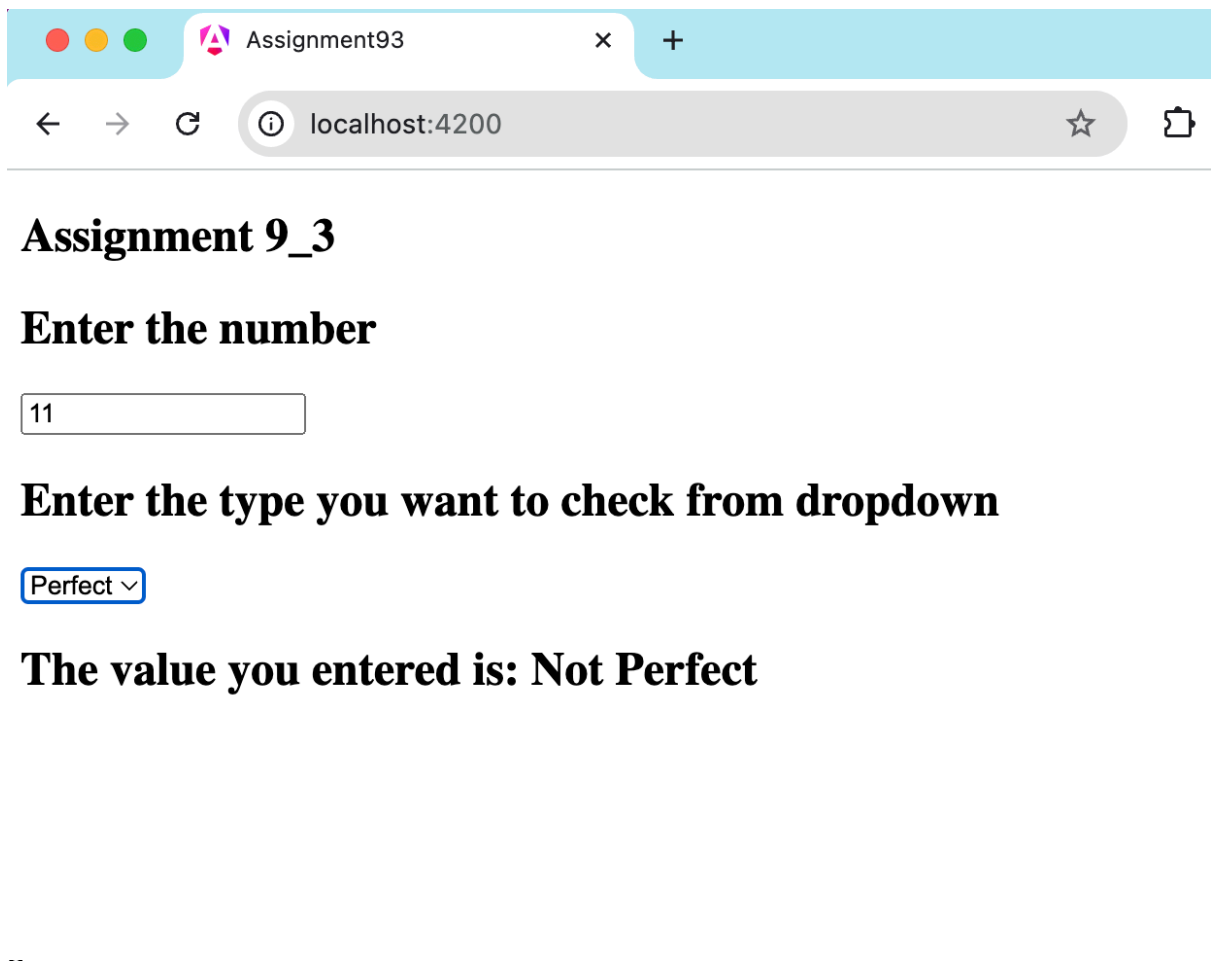
Enter the number

11

Enter the type you want to check from dropdown

Prime

The value you entered is: Prime



A second screenshot of the same web browser window. The page content is identical to the first, but the dropdown menu now shows 'Perfect'. The final line of text on the page is 'The value you entered is: Not Perfect'.

Assignment 9_3

Enter the number

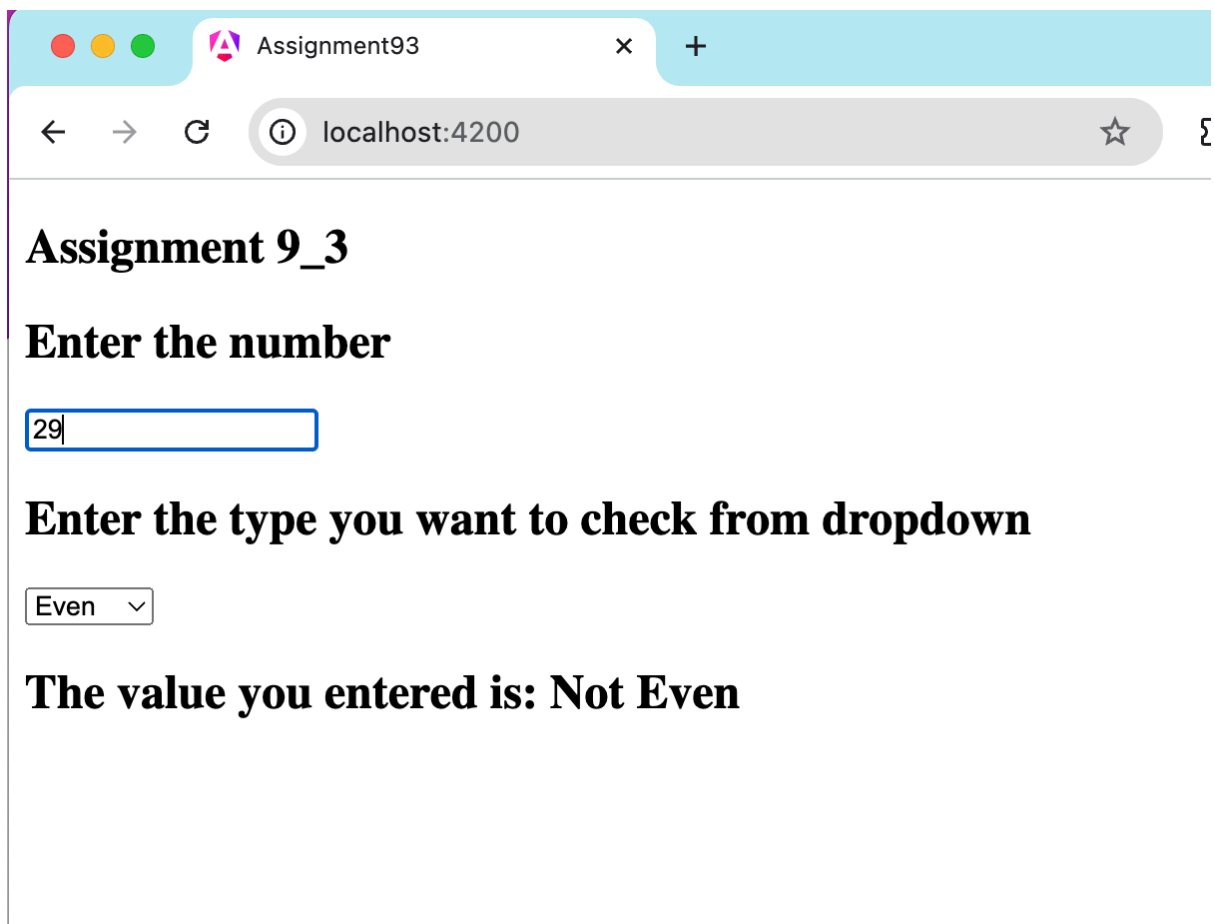
11

Enter the type you want to check from dropdown

Perfect

The value you entered is: Not Perfect

Assignment 9



Assignment93

localhost:4200

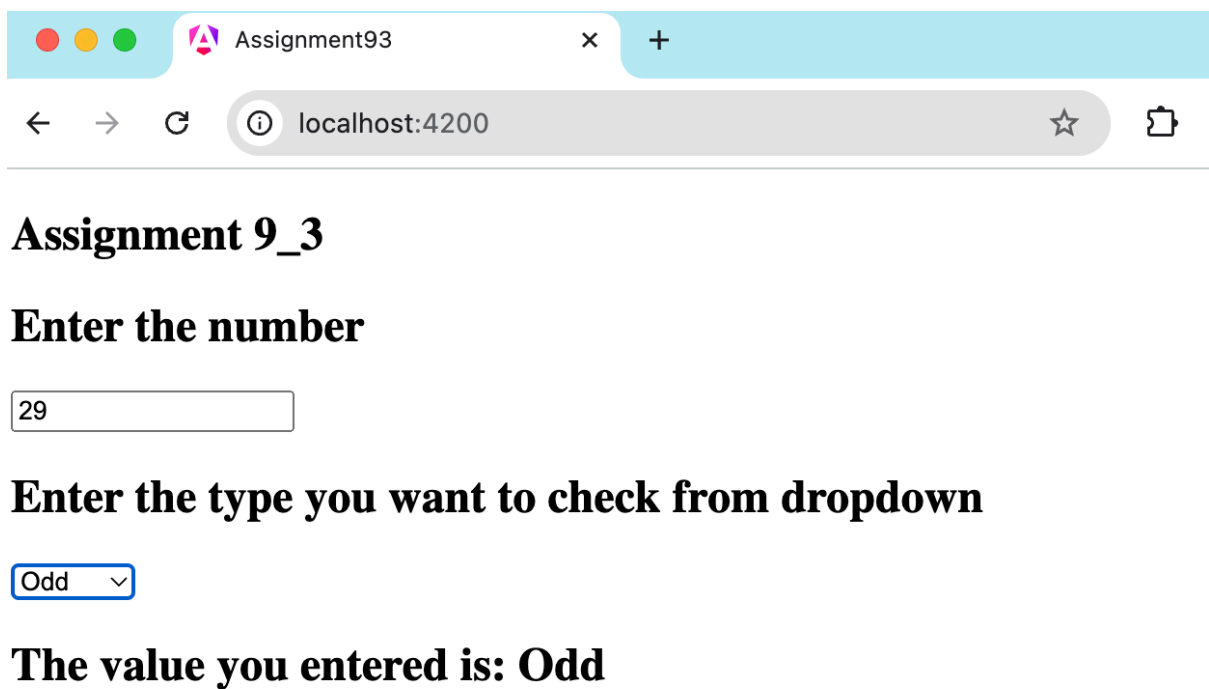
Assignment 9_3

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

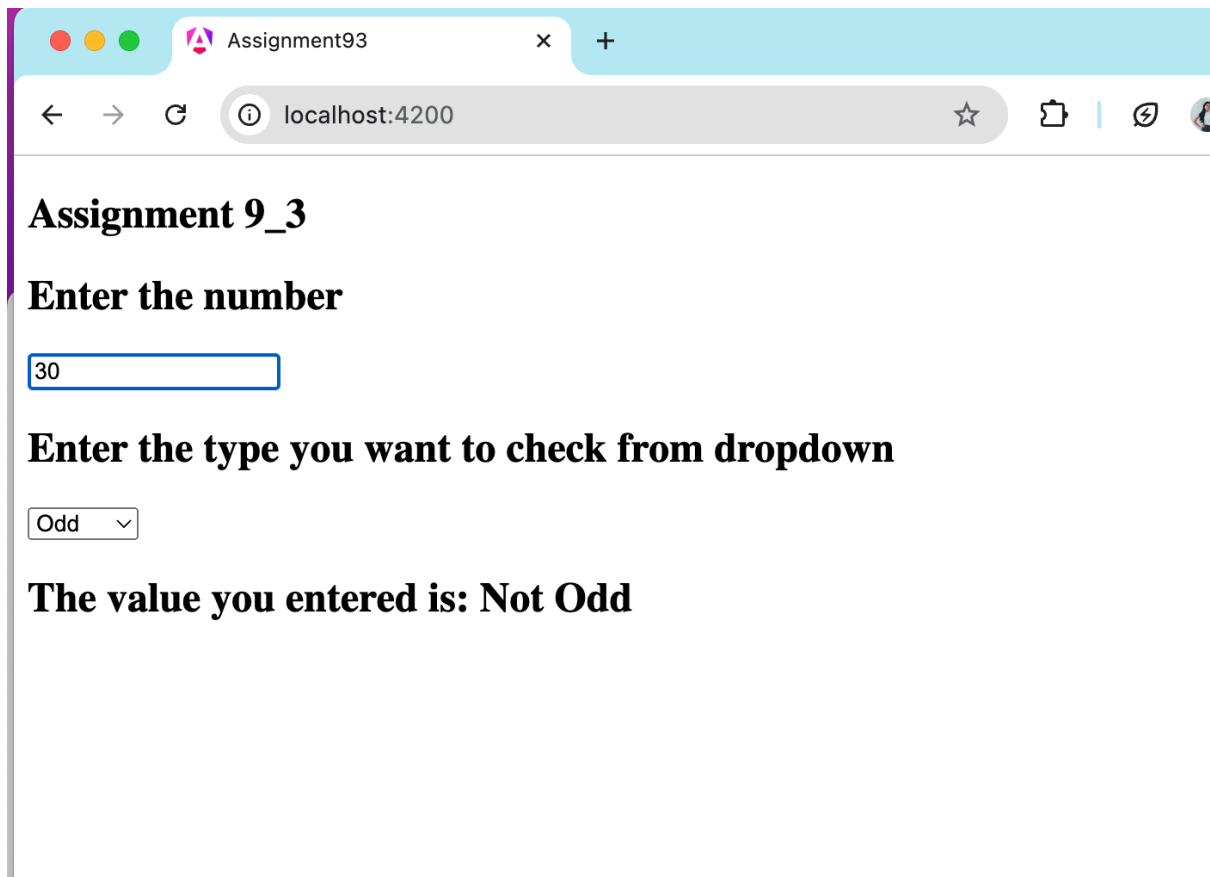
Enter the number

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