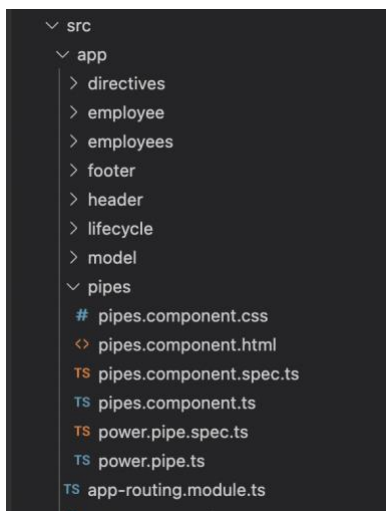


## STEP 10: Pipes

1. Add Pipes component by executing the below command from the angulardemo folder:  
ng g c pipes
2. Add a custom pipe **from within the pipes folder** by executing the below command:  
ng g p power

```
(base) Manishs-MacBook-Pro:angulardemo Shalini$ ng g c pipes
Node.js version v17.5.0 detected.
Odd numbered Node.js versions will not enter LTS status and should not be used for production.
For more information, please see https://nodejs.org/en/about/releases/.
CREATE src/app/pipes/pipes.component.css (0 bytes)
CREATE src/app/pipes/pipes.component.html (20 bytes)
CREATE src/app/pipes/pipes.component.spec.ts (592 bytes)
CREATE src/app/pipes/pipes.component.ts (271 bytes)
UPDATE src/app/app.module.ts (1236 bytes)
(base) Manishs-MacBook-Pro:angulardemo Shalini$ cd src/app/pipes/
(base) Manishs-MacBook-Pro:pipes Shalini$ ng g p power
Node.js version v17.5.0 detected.
Odd numbered Node.js versions will not enter LTS status and should not be used for production.
For more information, please see https://nodejs.org/en/about/releases/.
CREATE src/app/pipes/power.pipe.spec.ts (183 bytes)
CREATE src/app/pipes/power.pipe.ts (215 bytes)
UPDATE src/app/app.module.ts (1299 bytes)
```

3. Folder structure looks as follows:



4. Comment out the previous tags from app.component.html file and add <app-pipes> tag
5. There are various built-in pipes available which can be used to format the output. Lets have a look at various in-built pipes
6. Add the below in pipes.component.html file:  
<h3>Pipes Demo</h3>
7. Decimal Pipe:  
<p ngNonBindable>{{ 3.14659265 | number: '3.1-2' }}</p>  
<p>{{ 3.14659265 | number: '3.1-2' }}</p>

For setting the Locale, add the following in app.module.ts

```
import { registerLocaleData } from '@angular/common';
import localeFr from '@angular/common/locales/fr';
// the second parameter 'fr' is optional
registerLocaleData(localeFr, 'fr');
```

```
<p ngNonBindable>{{ 3.14159265 | number: '3.1-2' : 'fr' }}</p>
<p>{{ 3.14159265 | number: '3.1-2' : 'fr' }}</p>
```

8. Inject Locale in constructor of pipes.component.ts as follows:  
 constructor(@Inject(LOCALE\_ID) public locale: string) { }

#### 9. Currency Pipe

```
<p>{{ 1234.56 | currency:'GBP':false }}</p>
<p>{{ 1234.56 | currency:"GBP":true }}</p>
<p>{{ locale }}</p>
```

#### 10. Date Pipe:

Add below property in pipes.component.ts :

```
bdate = new Date()
```

Add below in pipes.component.html

```
<p>{{ bdate }}</p>
<p>{{ bdate | date:'short' }}</p>
<p>{{ bdate | date:'long' }}</p>
<p>{{ bdate | date:'medium' }}</p>
```

#### 11. JSON Pipe:

Add below property in pipes.component.ts :

```
object: Object = {foo: 'bar', baz: 'qux', nested: {xyz: 3, numbers: [1, 2, 3, 4, 5]};
```

Add below in pipes.component.html

```
<p>Without JSON pipe:</p>
<pre>{{ object }}</pre>
<p>With JSON pipe:</p>
<pre>{{ object | json }}</pre>
```

#### 12. Lower and Upper case pipe

Example :

```
<p>{{ 'ASIM' | lowercase }}</p>
```

**Uppercase** : Transforms a string to uppercase

**Example** :

```
<p>{{ 'asim' | uppercase }}</p>
```

### 13. Percent Pipe

```
<p ngNonBindable>{{ 0.123456 | percent }}</p>
<p>{{ 0.123456 | percent }}</p>    //12.346%
<p ngNonBindable>{{ 0.123456 | percent: '2.1-2' }}</p>
<p>{{ 0.123456 | percent: '2.1-2' }}</p>    //12.35%
<p ngNonBindable>{{ 42 | percent: '10.4-4' }}</p>
<p>{{ 0.123456 | percent : "10.4-4" }}</p>
    //0,000,000,012.3456%
```

### 14. Slice Pipe

```
<p ngNonBindable>{{ [1,2,3,4,5,6] | slice:1:3 }}</p>
<p>{{ [1,2,3,4,5,6] | slice:1:3 }}</p>    //2,3
    <p ngNonBindable>{{ [1,2,3,4,5,6] | slice:2 }}</p>
    <p>{{ [1,2,3,4,5,6] | slice:2 }}</p>    //3,4,5,6
    <p ngNonBindable>{{ [1,2,3,4,5,6] | slice:2:-1 }}</p>
    <p>{{ [1,2,3,4,5,6] | slice:2:-1 }}</p>    //3,4,5
    <pre ngNonBindable><ul>
    <li *ngFor='v of [1,2,3,4,5,6] | slice:2:-1'>
        {{v}}
    </li></ul>
    </pre>
    <ul>
        // 3 4 5
        <li *ngFor="let v of [1,2,3,4,5,6] | slice:2:-1">
            {{v}}
        </li>
    </ul>
```

### 15. Custom Pipe

Modify transform function of power.pipe.ts:

```
transform(value: number, ...args: number[]): unknown {
    console.log(value)
    console.log(args)
    let power = 0;
    if(args.length == 0)
        power = 2;
    else
        power = args[0]
    return value** power ;
}
```

Add below in pipes.component.html

```
<p ngNonBindable>{{ 20 | power}}</p>
<p>20<sup>4</sup> : {{ 20 | power:5}}</p>
```