How to Create a Custom Pipe?

To create a custom pipe, we have created a new ts file. Here, we want to create the sqrt custom pipe. We have given the same name to the file and it looks as follows −

***app.sqrt.ts***

import {Pipe, PipeTransform} from '@angular/core';

@Pipe ({

name : 'sqrt'

})

export class SqrtPipe implements PipeTransform {

transform(val : number) : number {

return Math.sqrt(val);

}

}

To create a custom pipe, we have to import Pipe and Pipe Transform from Angular/core. In the @Pipe directive, we have to give the name to our pipe, which will be used in our .html file. Since, we are creating the sqrt pipe, we will name it sqrt.

As we proceed further, we have to create the class and the class name is SqrtPipe. This class will implement the PipeTransform.

The transform method defined in the class will take argument as the number and will return the number after taking the square root.

Since we have created a new file, we need to add the same in **app.module.ts**. This is done as follows −

import { BrowserModule } from '@angular/platform-browser';

import { NgModule } from '@angular/core';

import { AppRoutingModule } from './app-routing.module';

import { AppComponent } from './app.component';

import { NewCmpComponent } from './new-cmp/new-cmp.component';

import { ChangeTextDirective } from './change-text.directive';

import { SqrtPipe } from './app.sqrt';

@NgModule({

declarations: [

SqrtPipe,

AppComponent,

NewCmpComponent,

ChangeTextDirective

],

imports: [

BrowserModule,

AppRoutingModule

],

providers: [],

bootstrap: [AppComponent]

})

export class AppModule { }

We have created the **app.sqrt.ts** class. We have to import the same in **app.module.ts** and specify the path of the file. It also has to be included in the declarations as shown above.

Let us now see the call made to the sqrt pipe in the **app.component.html** file.

<h1>Custom Pipe</h1>

<b>Square root of 25 is: {{25 | sqrt}}</b>

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<b>Square root of 729 is: {{729 | sqrt}}</b>