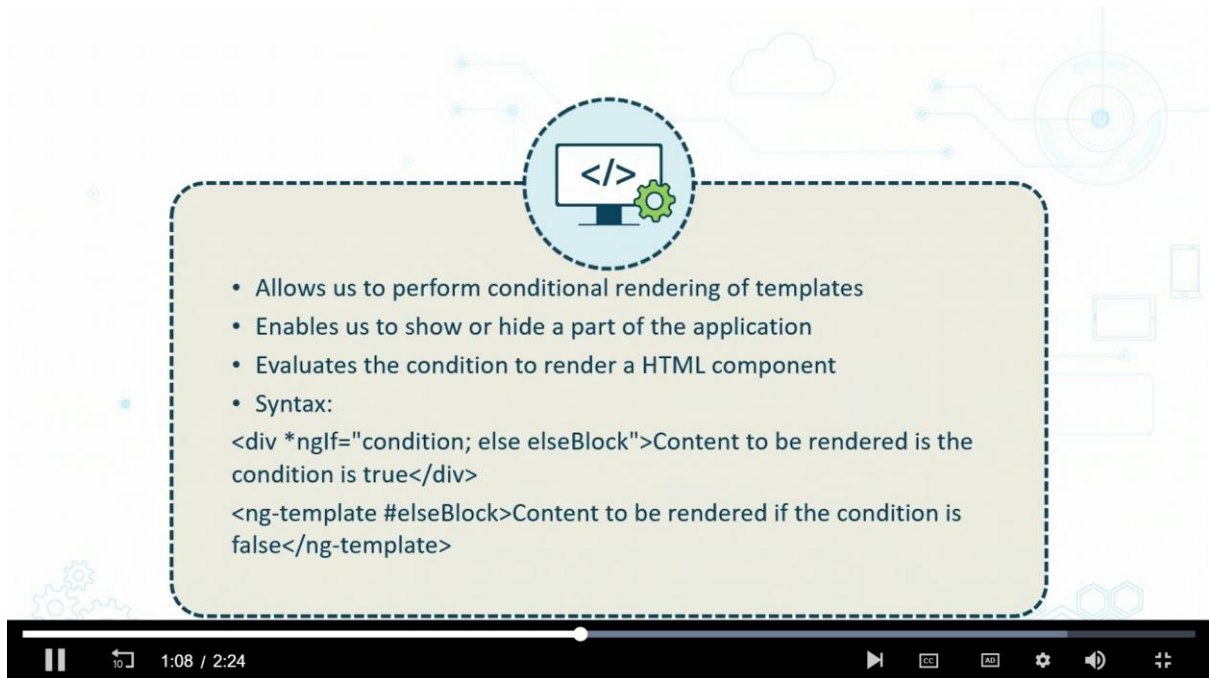


Adding Logic to component using ngIf

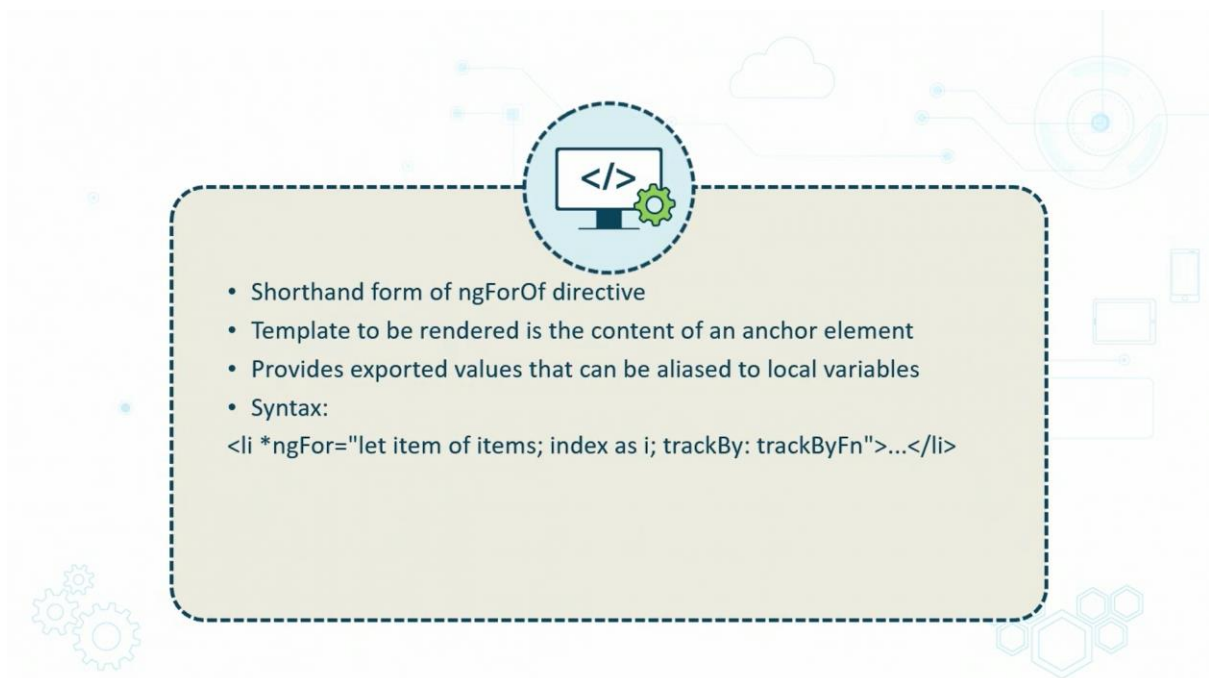


The slide is titled "Adding Logic to component using ngIf". It features a central beige box with a dashed blue border. Above the box is a circular icon containing a code editor symbol and a green gear. The slide lists the following points:

- Allows us to perform conditional rendering of templates
- Enables us to show or hide a part of the application
- Evaluates the condition to render a HTML component
- Syntax:
`<div *ngIf="condition; else elseBlock">Content to be rendered is the condition is true</div>`
`<ng-template #elseBlock>Content to be rendered if the condition is false</ng-template>`

The video player interface at the bottom shows a progress bar at 1:08 / 2:24 and various control icons.

Ngfor

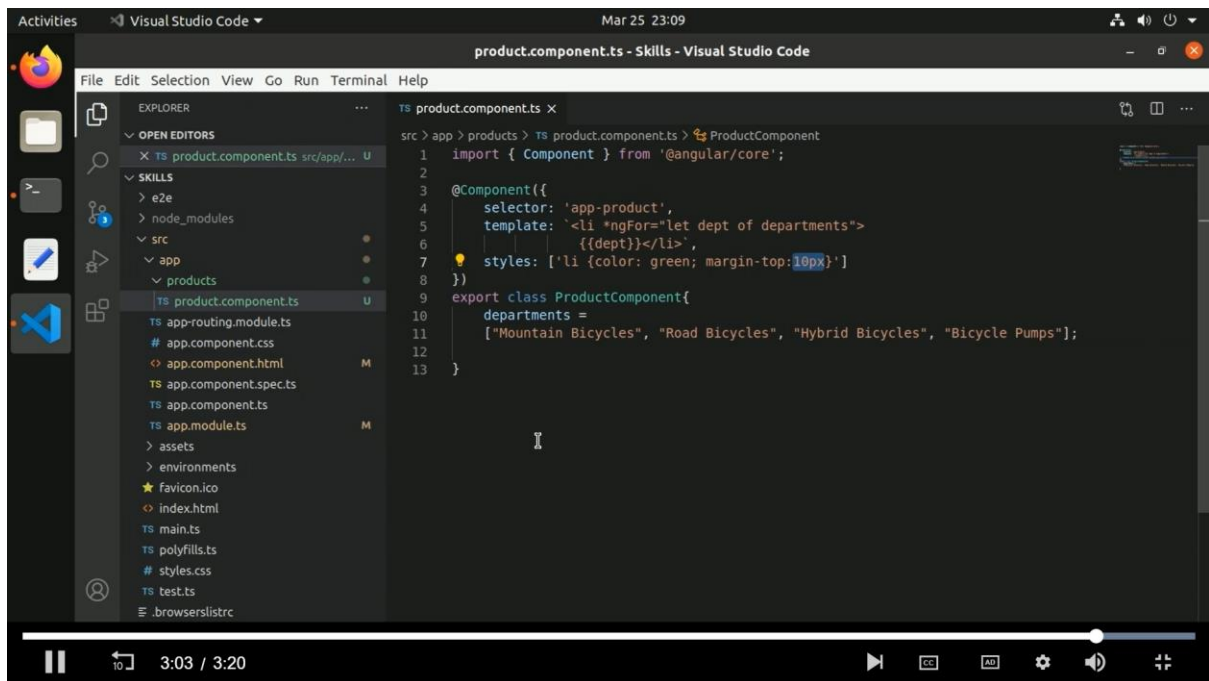


The slide is titled "Ngfor". It features a central beige box with a dashed blue border. Above the box is a circular icon containing a code editor symbol and a green gear. The slide lists the following points:

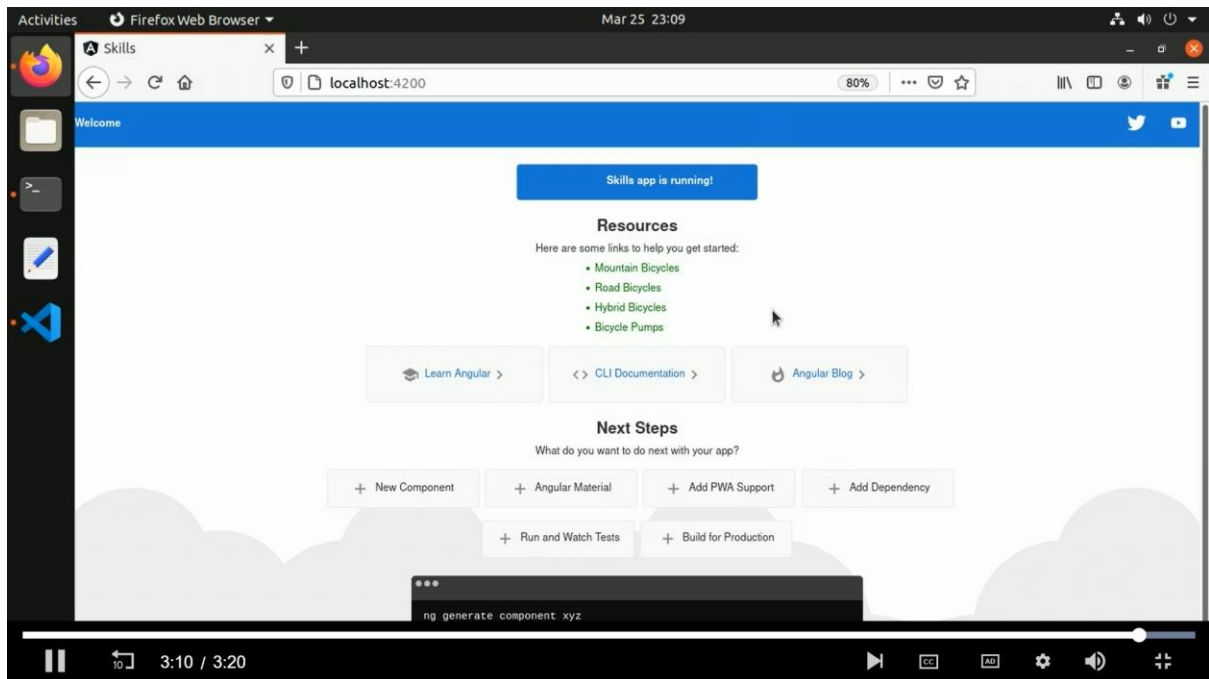
- Shorthand form of ngForOf directive
- Template to be rendered is the content of an anchor element
- Provides exported values that can be aliased to local variables
- Syntax:
`<li *ngFor="let item of items; index as i; trackBy: trackByFn">...`

The video player interface at the bottom shows a progress bar at 1:08 / 2:24 and various control icons.

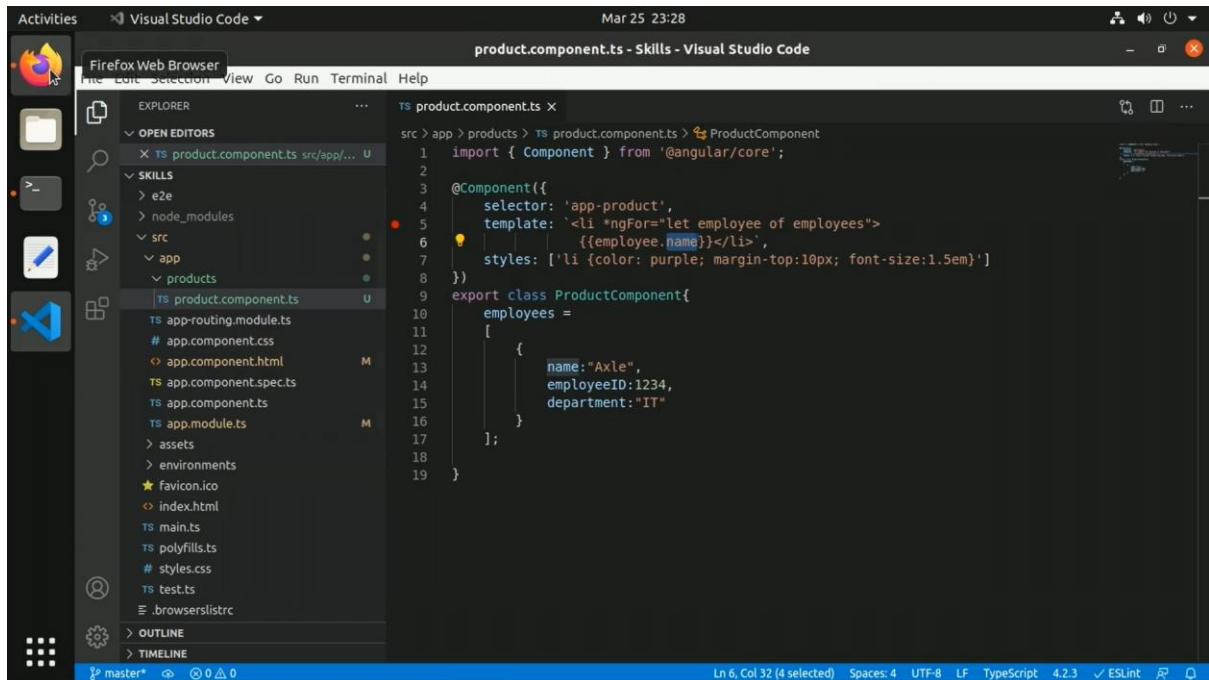
Iterating array with ngFor



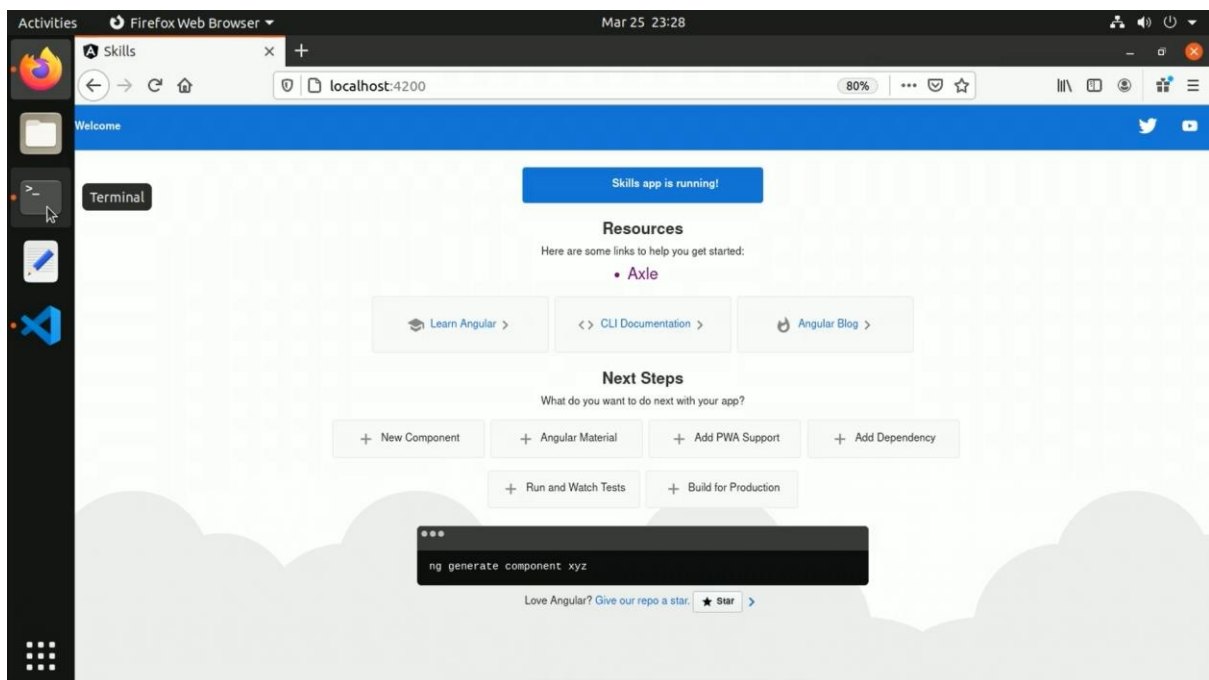
Out

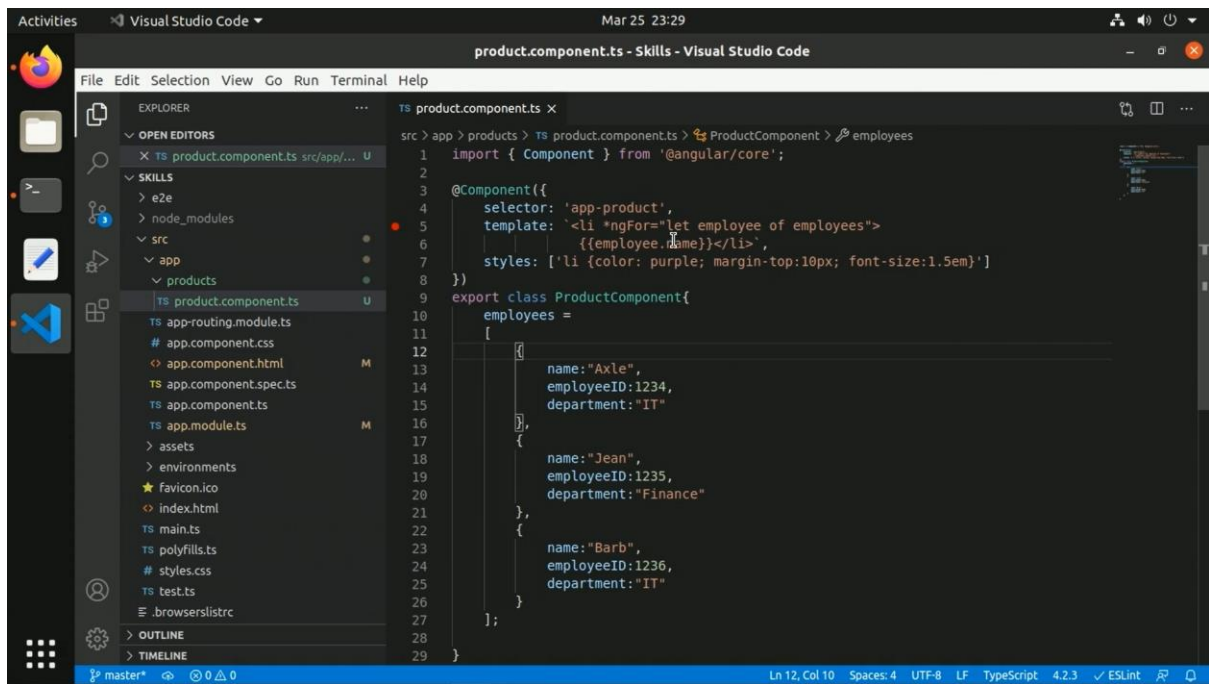
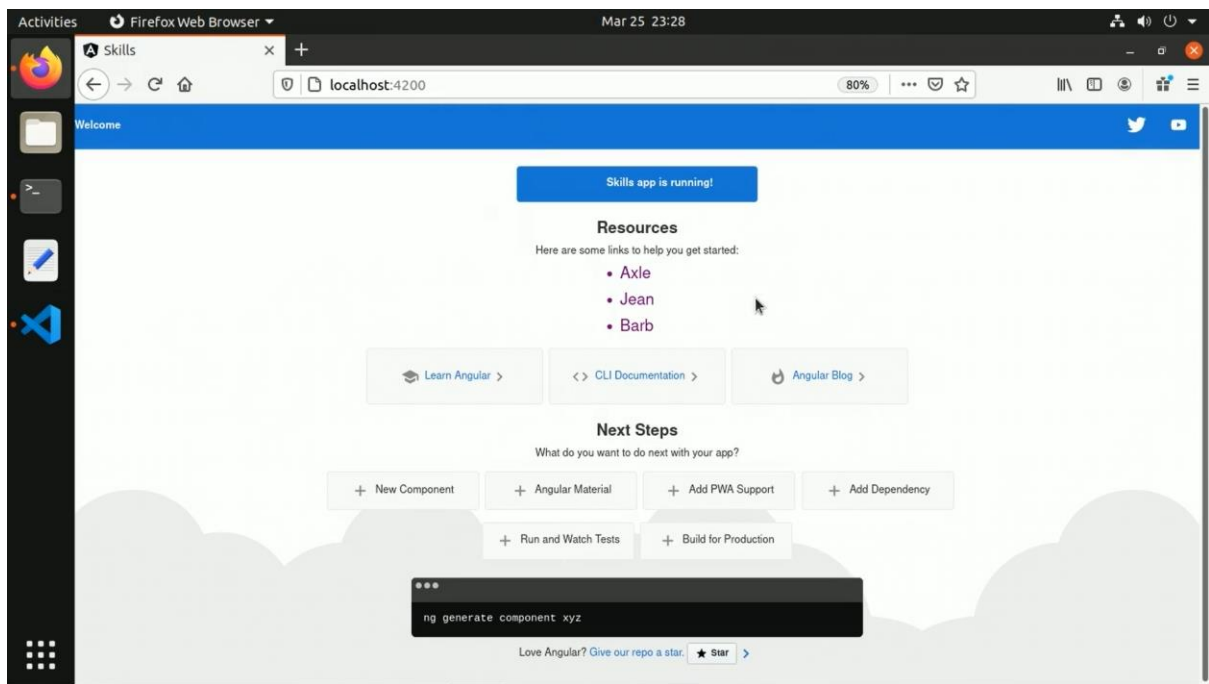


Iterating through complex objects

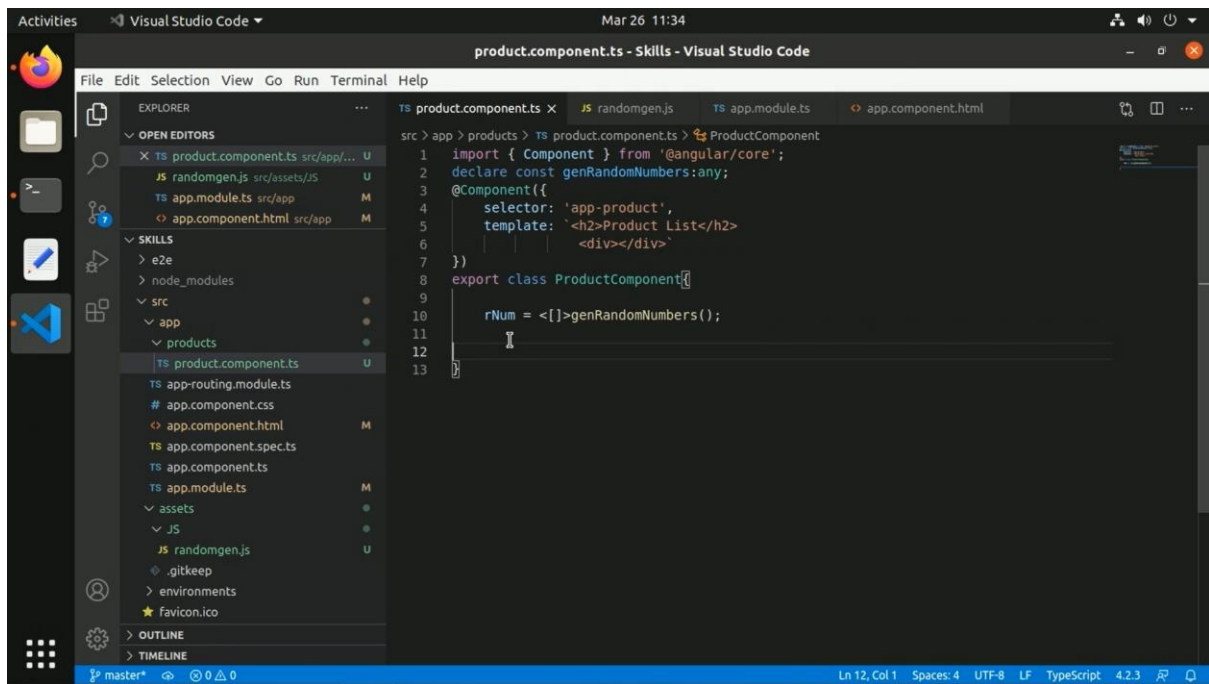
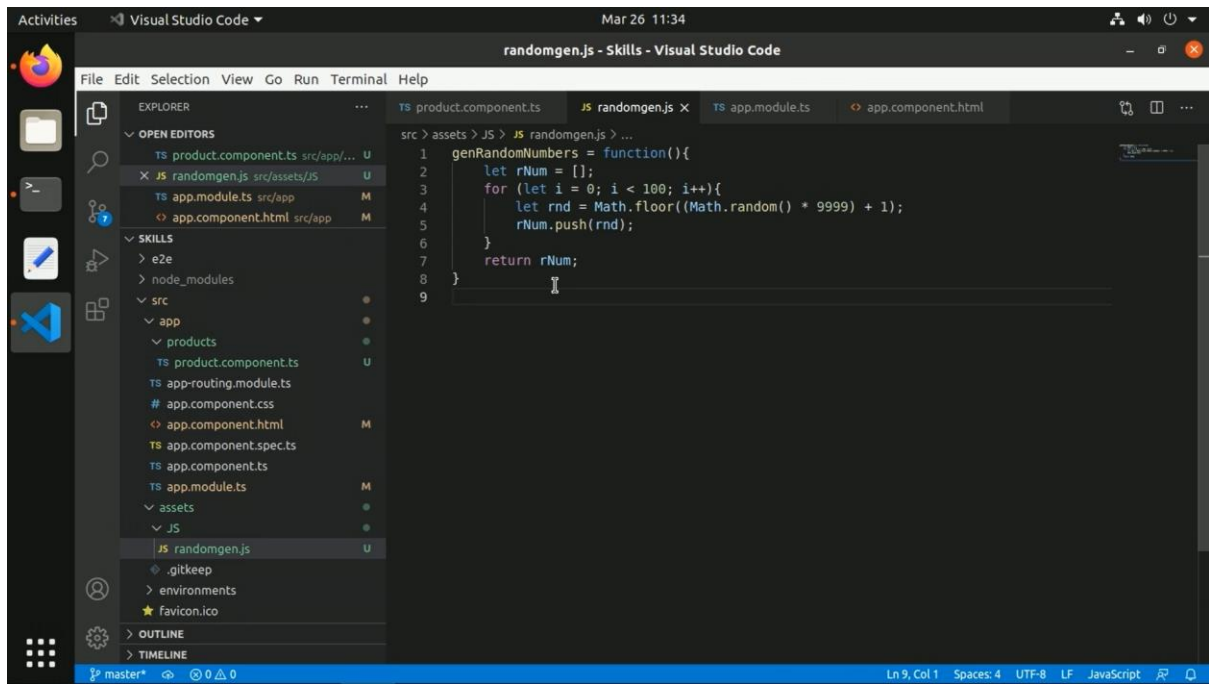


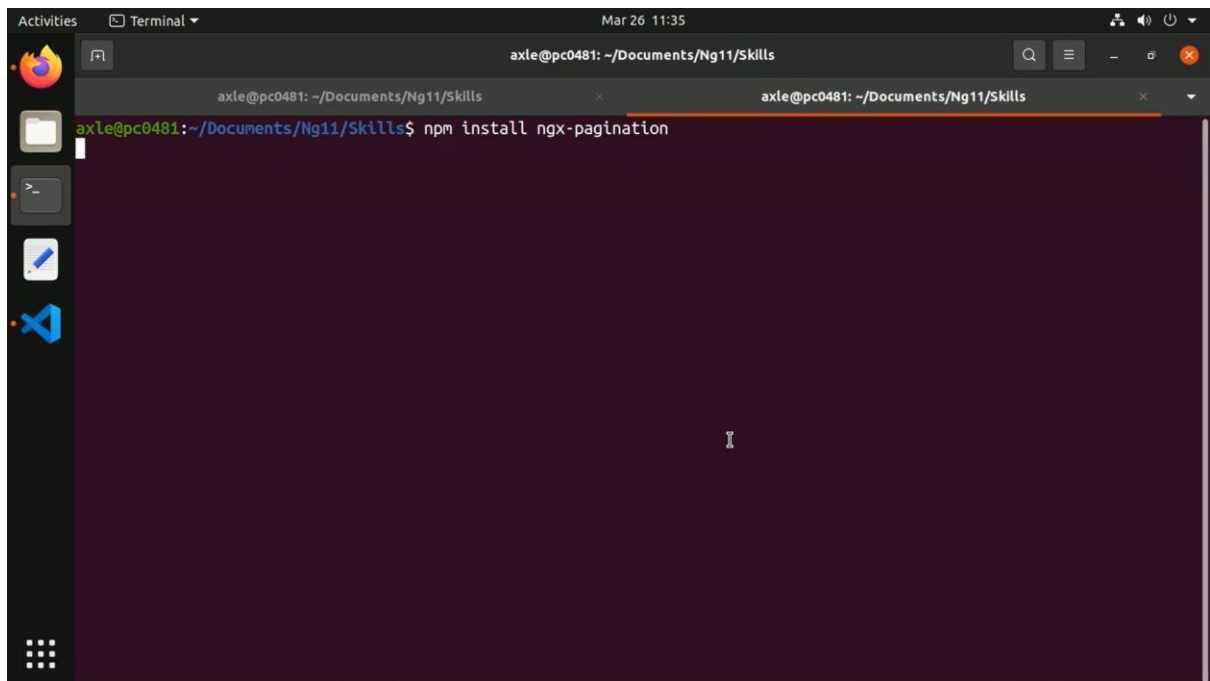
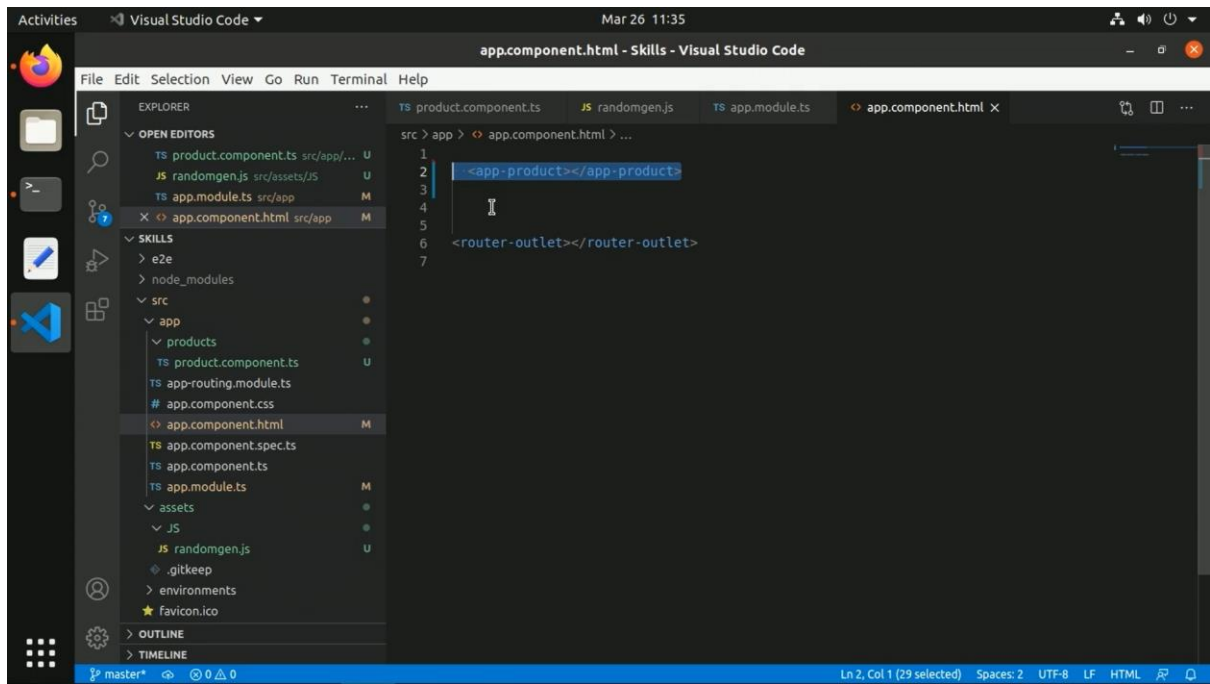
```
src > app > products > TS product.component.ts > ProductComponent
1 import { Component } from '@angular/core';
2
3 @Component({
4   selector: 'app-product',
5   template: '<li *ngFor="let employee of employees">
6     {{employee.name}}</li>',
7   styles: ['li {color: purple; margin-top:10px; font-size:1.5em}']
8 })
9 export class ProductComponent{
10   employees =
11   [
12     {
13       name: "Axle",
14       employeeID: 1234,
15       department: "IT"
16     }
17   ];
18
19 }
```

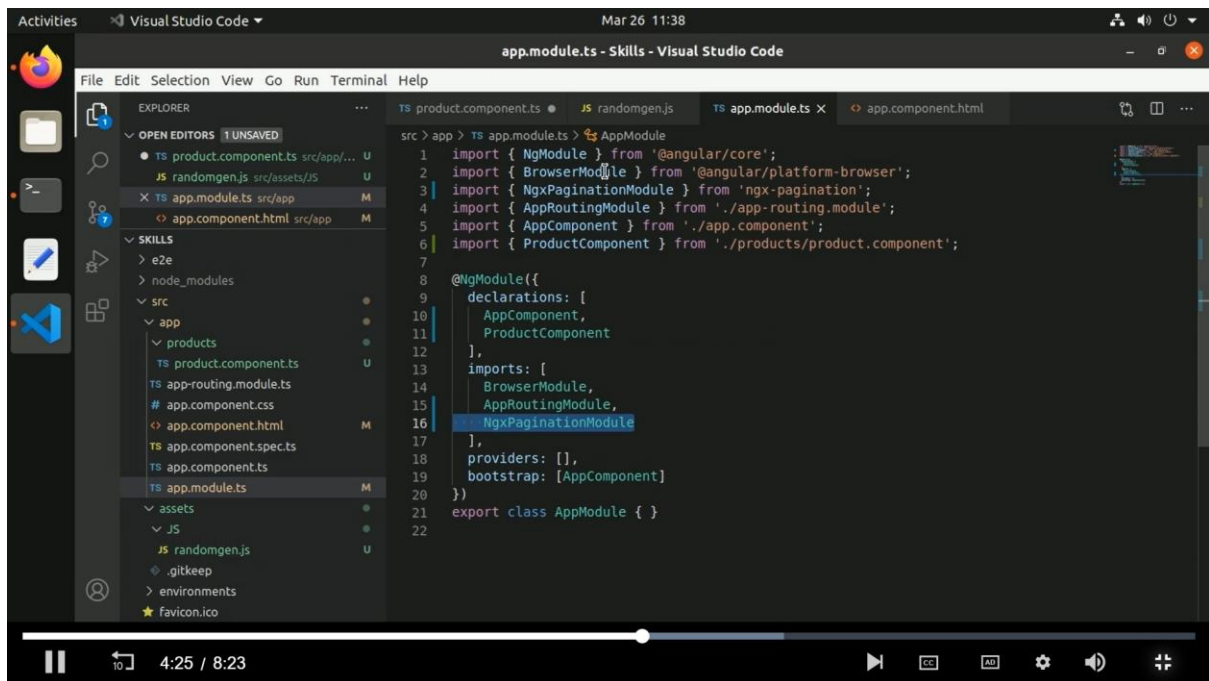
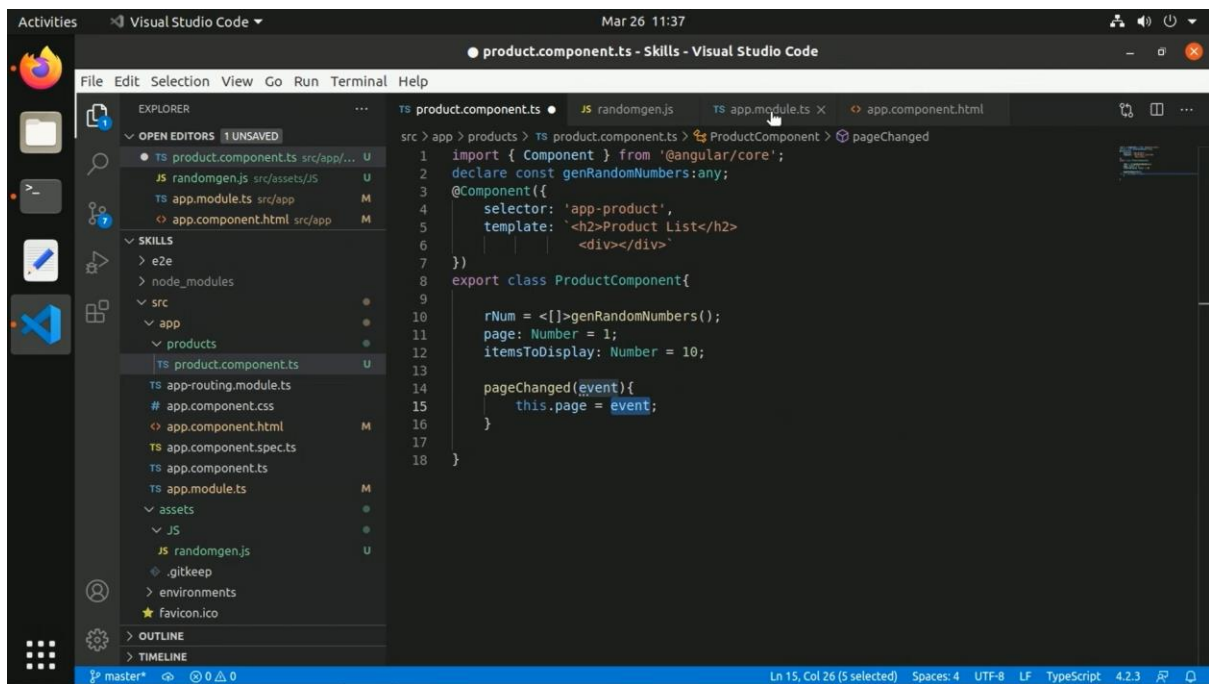


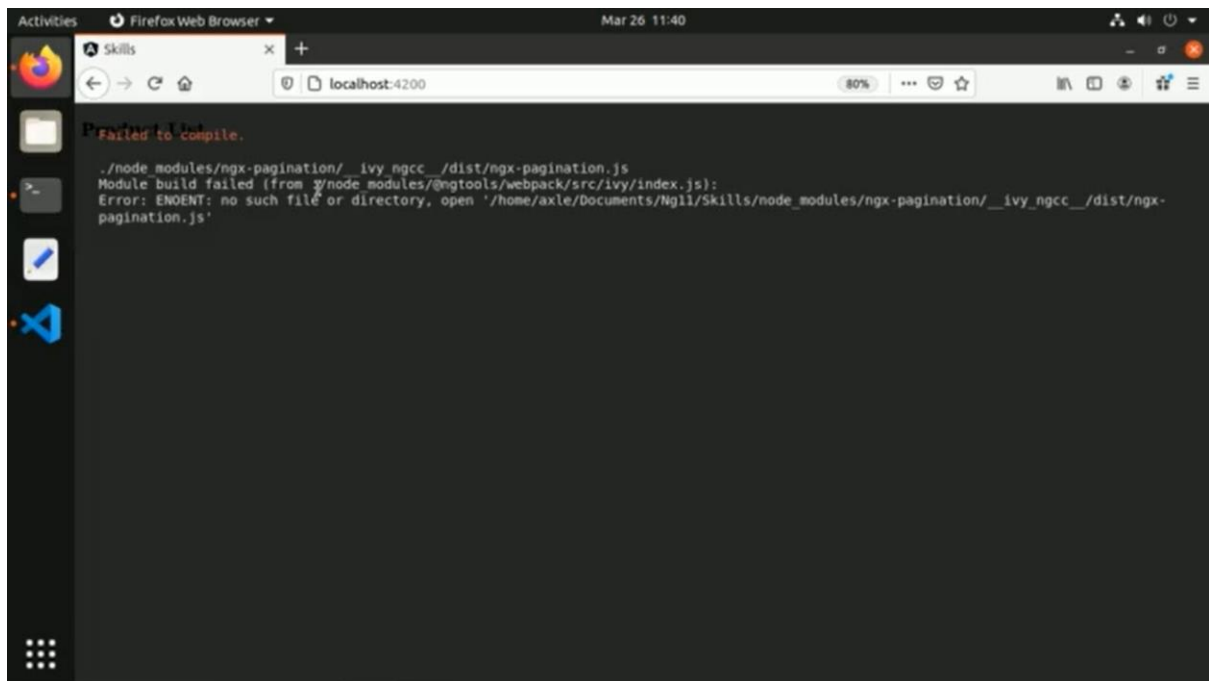
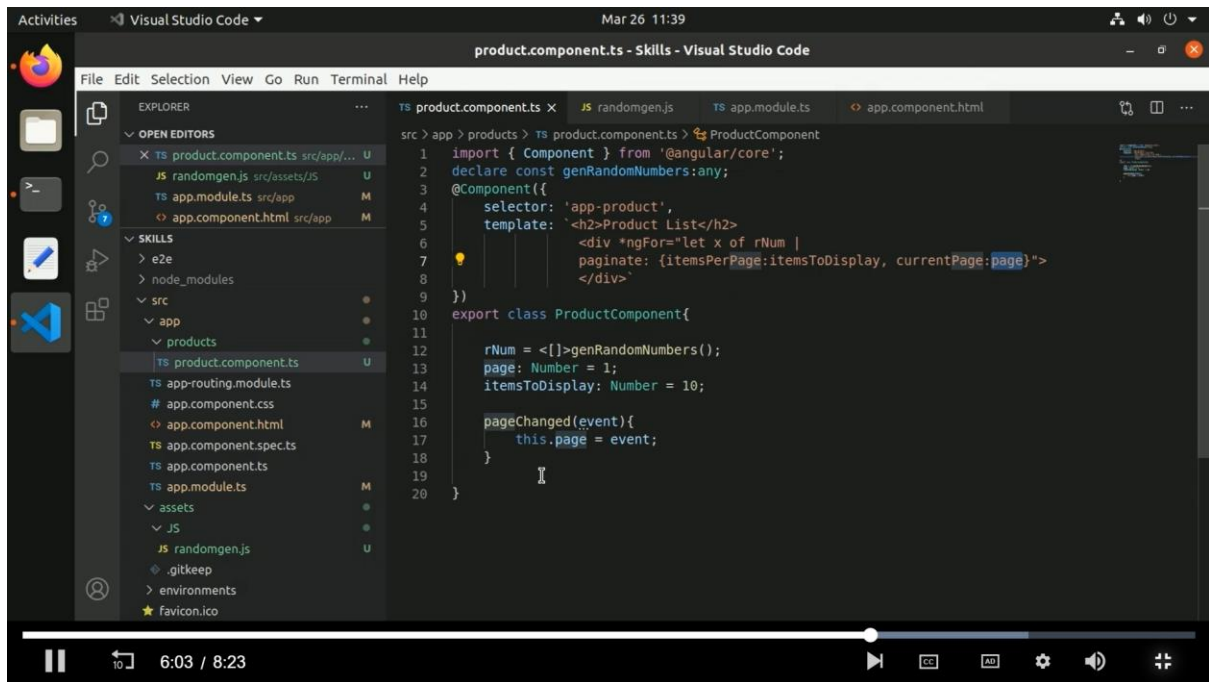


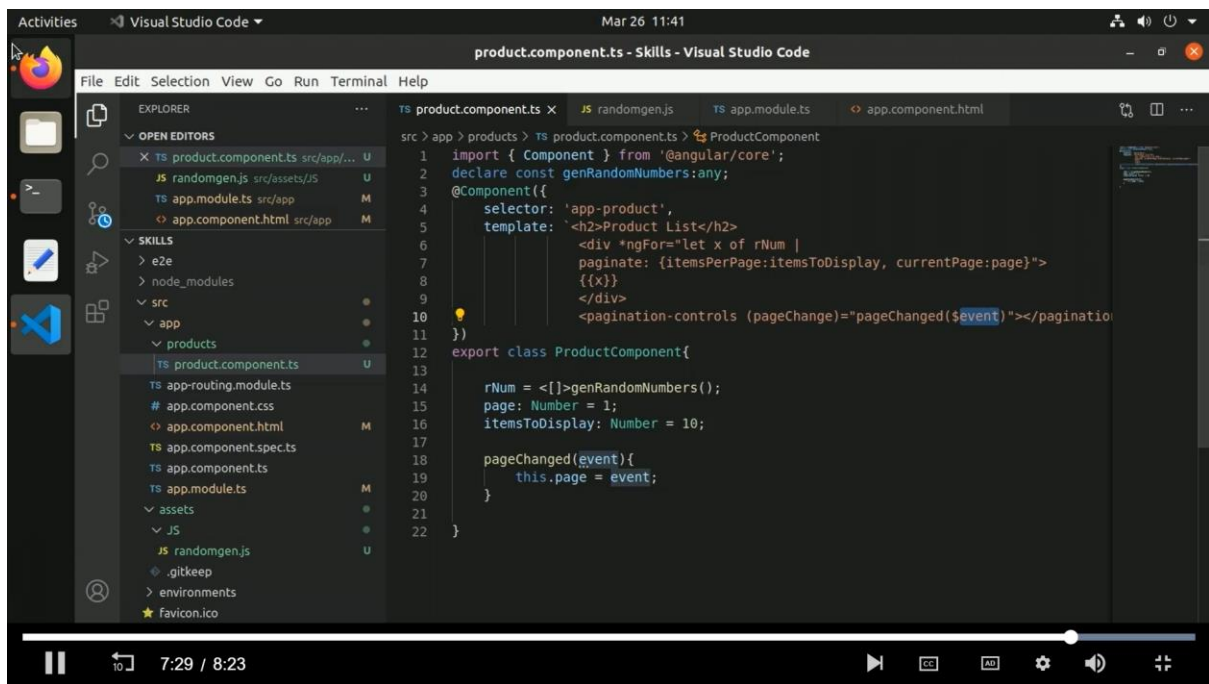
Implementing Pagination in Angular



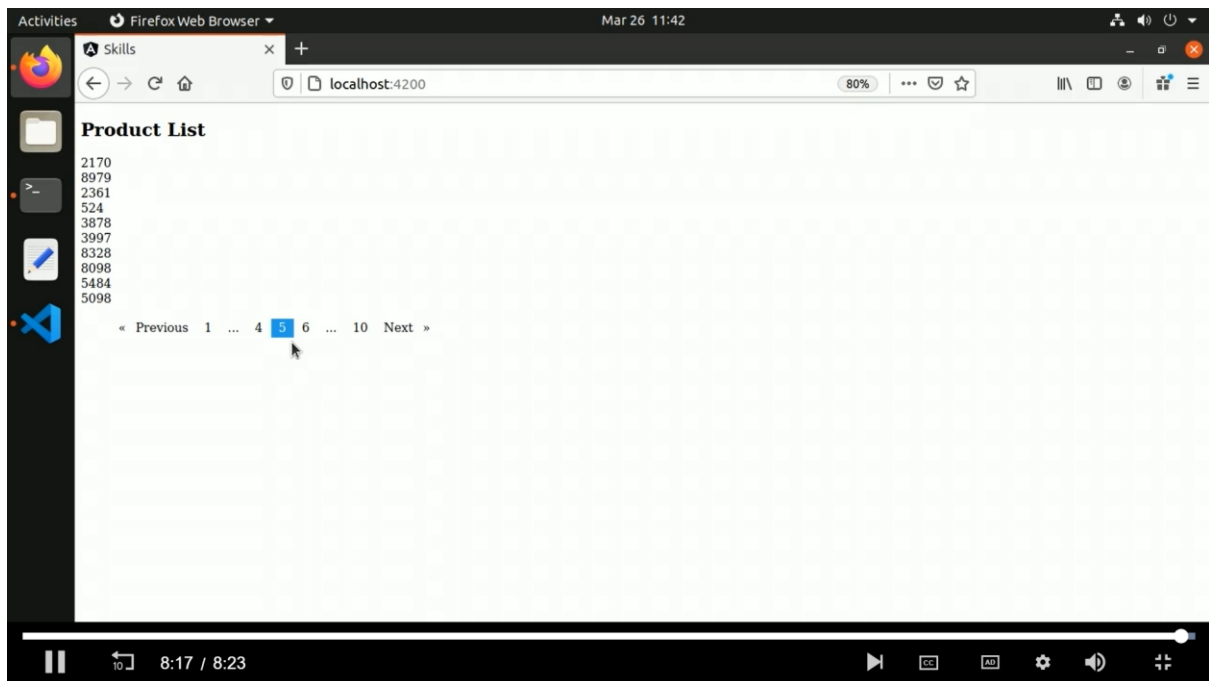




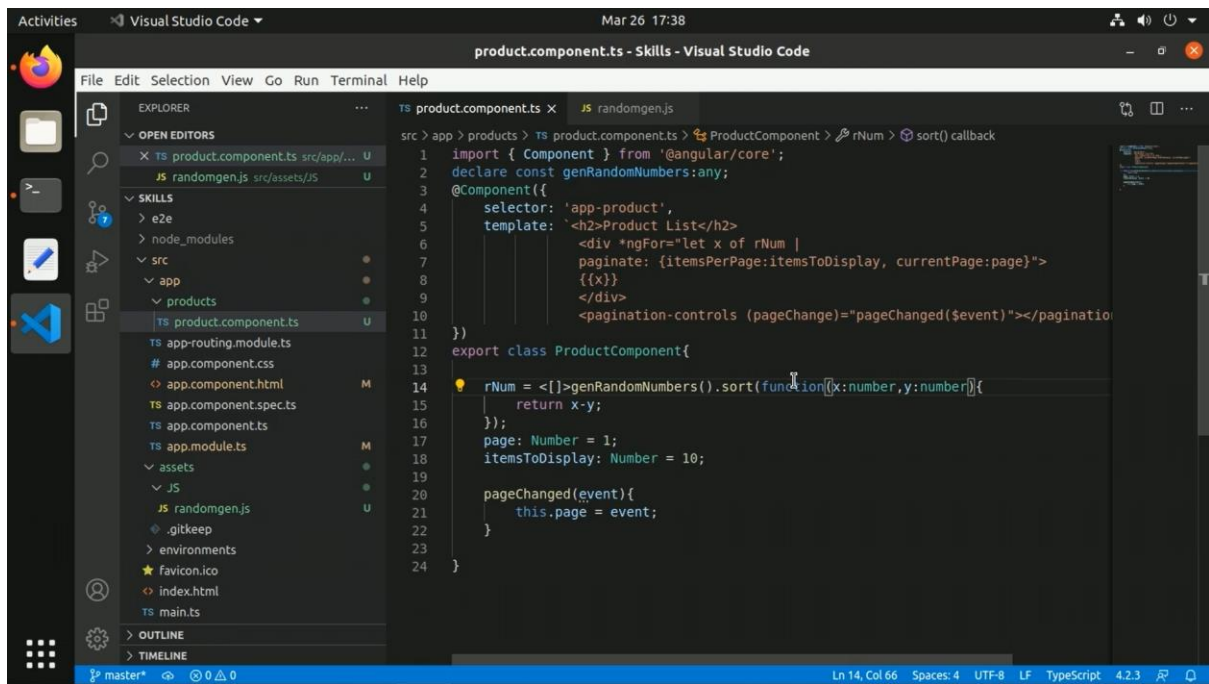
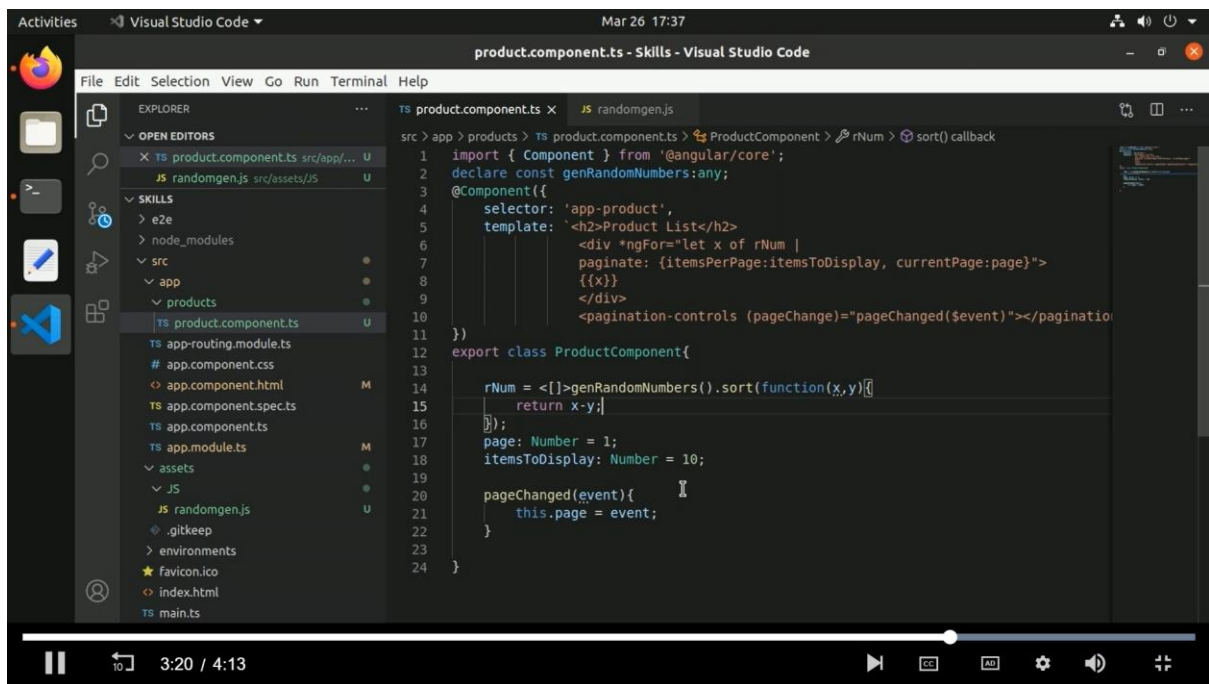




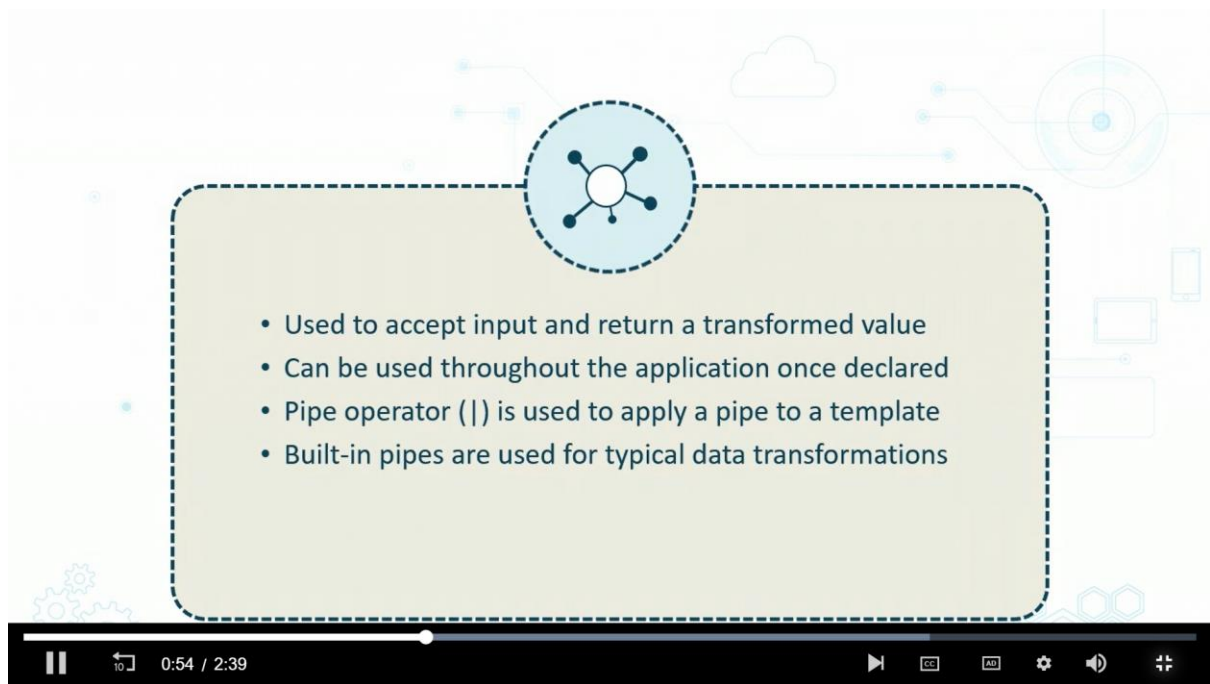
```
1 import { Component } from '@angular/core';
2 declare const genRandomNumbers:any;
3 @Component({
4   selector: 'app-product',
5   template: `<h2>Product List</h2>
6     <div *ngFor="let x of rNum |
7       paginate: {itemsPerPage:itemsToDisplay, currentPage:page}">
8       {{x}}
9     </div>
10    <pagination-controls (pageChange)="pageChanged($event)"></pagination-controls>`
11 })
12 export class ProductComponent{
13
14   rNum = <[]>genRandomNumbers();
15   page: Number = 1;
16   itemsToDisplay: Number = 10;
17
18   pageChanged(event){
19     this.page = event;
20   }
21
22 }
```



Sorting List data with angular

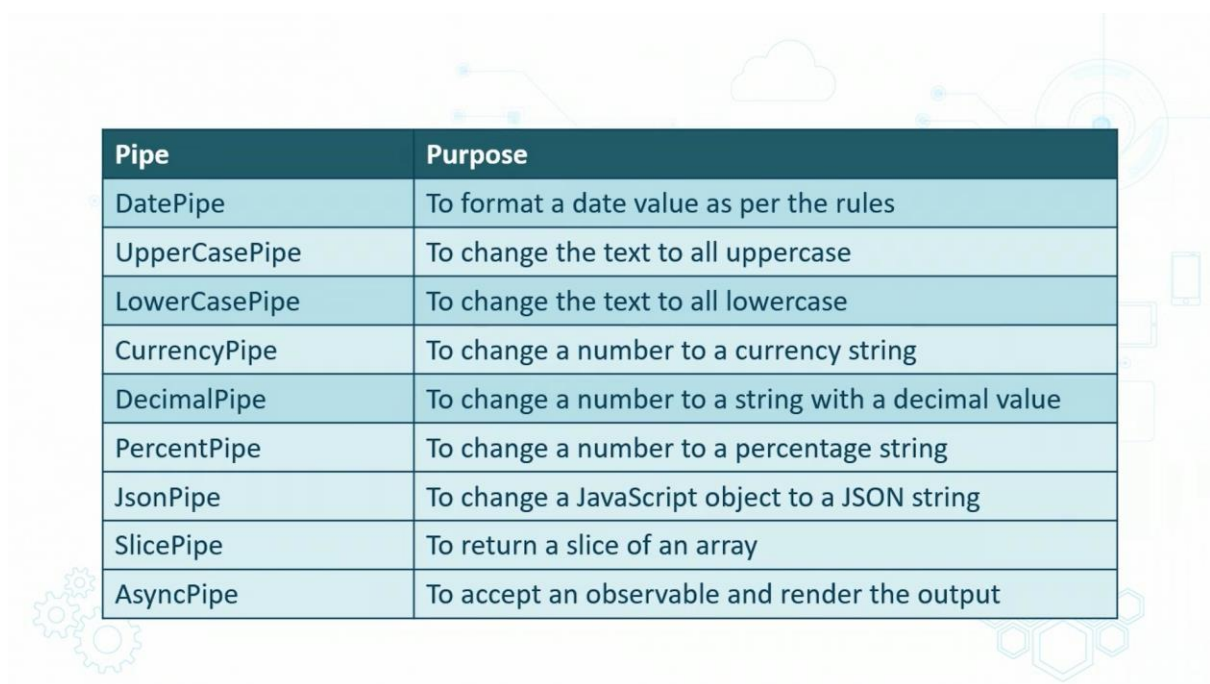


Build in pipes in angular.



A video player interface showing a list of pipe characteristics. The video is paused at 0:54 / 2:39. The list is as follows:

- Used to accept input and return a transformed value
- Can be used throughout the application once declared
- Pipe operator (|) is used to apply a pipe to a template
- Built-in pipes are used for typical data transformations



Pipe	Purpose
DatePipe	To format a date value as per the rules
UpperCasePipe	To change the text to all uppercase
LowerCasePipe	To change the text to all lowercase
CurrencyPipe	To change a number to a currency string
DecimalPipe	To change a number to a string with a decimal value
PercentPipe	To change a number to a percentage string
JsonPipe	To change a JavaScript object to a JSON string
SlicePipe	To return a slice of an array
AsyncPipe	To accept an observable and render the output

Custom pipes in angular

Ng g pipe classify

Activities Terminal Mar 26 22:38

axle@pc0481: ~/Documents/Ng11/Skills

axle@pc0481: ~/Documents/Ng11/Skills

```
axle@pc0481:~/Documents/Ng11/Skills$ ng g pipe classify
CREATE src/app/classify.pipe.spec.ts (195 bytes)
CREATE src/app/classify.pipe.ts (221 bytes)
UPDATE src/app/app.module.ts (624 bytes)
axle@pc0481:~/Documents/Ng11/Skills$
```

1:32 / 5:25

Activities Visual Studio Code Mar 26 22:39

product.component.ts - Skills - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

OPEN EDITORS

TS product.component.ts src/app/... U

SKILLS

e2e

node_modules

src

app

products

product.component.ts U

app-routing.module.ts

app.component.css

app.component.html M

app.component.spec.ts

app.component.ts

app.module.ts M

classify.pipe.spec.ts U

classify.pipe.ts U

assets

environments

favicon.ico

index.html

main.ts

polyfills.ts

styles.css

src > app > products > TS product.component.ts > ProductComponent

```
1 import { Component } from '@angular/core';
2 declare const genRandomNumbers:any;
3 @component({
4   selector: 'app-product',
5   template: `<h2>Product List</h2>
6     <div *ngFor="let x of rNum |
7       paginate: {itemsPerPage:itemsToDisplay, currentPage:page}">
8       {{x}}
9     </div>
10    <pagination-controls (pageChange)="pageChanged($event)"></pagination-controls>`
11 })
12 export class ProductComponent{
13
14   rNum = <[]>genRandomNumbers().sort(function(x:number,y:number){
15     return x-y;
16   });
17   page: Number = 1;
18   itemsToDisplay: Number = 10;
19
20   pageChanged(event):void{
21     this.page = event.page;
22   }
23
24 }
```

~/Documents/Ng11/Skills/src/app/classify.pipe.ts • Untracked

2:01 / 5:25

Activities Visual Studio Code Mar 26 22:39

app.module.ts - Skills - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

OPEN EDITORS

TS product.component.ts src/app/... U

TS app.module.ts src/app M

SKILLS

e2e

node_modules

src

app

products

product.component.ts U

app-routing.module.ts

app.component.css

app.component.html M

app.component.spec.ts

app.component.ts

app.module.ts M

classify.pipe.spec.ts U

classify.pipe.ts U

assets

environments

favicon.ico

index.html

main.ts

polyfills.ts

src > app > TS app.module.ts > AppModule

```
1 import { NgModule } from '@angular/core';
2 import { BrowserModule } from '@angular/platform-browser';
3 import { NgxPaginationModule } from 'ngx-pagination';
4 import { AppRoutingModuleModule } from './app-routing.module';
5 import { AppComponent } from './app.component';
6 import { ProductComponent } from './products/product.component';
7 import { ClassifyPipe } from './classify.pipe';
8
9 @NgModule({
10   declarations: [
11     AppComponent,
12     ProductComponent,
13     ClassifyPipe
14   ],
15   imports: [
16     BrowserModule,
17     AppRoutingModuleModule,
18     NgxPaginationModule
19   ],
20   providers: [],
21   bootstrap: [AppComponent]
22 })
23 export class AppModule { }
24
```

2:08 / 5:25

Activities Visual Studio Code Mar 26 22:39

app.module.ts - Skills - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

- OPEN EDITORS
 - TS product.component.ts src/app/...
 - TS app.module.ts src/app
- SKILLS
 - e2e
 - node_modules
 - src
 - app
 - products
 - TS product.component.ts
 - TS app-routing.module.ts
 - # app.component.css
 - app.component.html
 - TS app.component.spec.ts
 - TS app.component.ts
 - TS app.module.ts
 - TS classify.pipe.spec.ts
 - TS classify.pipe.ts
 - assets
 - environments
 - favicon.ico
 - index.html
 - TS main.ts
 - polyfills.ts

src > app > TS app.module.ts > AppModule

```
1 import { NgModule } from '@angular/core';
2 import { BrowserModule } from '@angular/platform-browser';
3 import { NgxPaginationModule } from 'ngx-pagination';
4 import { AppRoutingModuleModule } from './app-routing.module';
5 import { AppComponent } from './app.component';
6 import { ProductComponent } from './products/product.component';
7 import { ClassifyPipe } from './classify.pipe';
8
9 @NgModule({
10   declarations: [
11     AppComponent,
12     ProductComponent,
13     ClassifyPipe
14   ],
15   imports: [
16     BrowserModule,
17     AppRoutingModuleModule,
18     NgxPaginationModule
19   ],
20   providers: [],
21   bootstrap: [AppComponent]
22 })
23 export class AppModule { }
```

2:14 / 5:25

Activities Visual Studio Code Mar 26 22:42

classify.pipe.ts - Skills - Visual Studio Code

File Edit Selection View Go Run Terminal Help

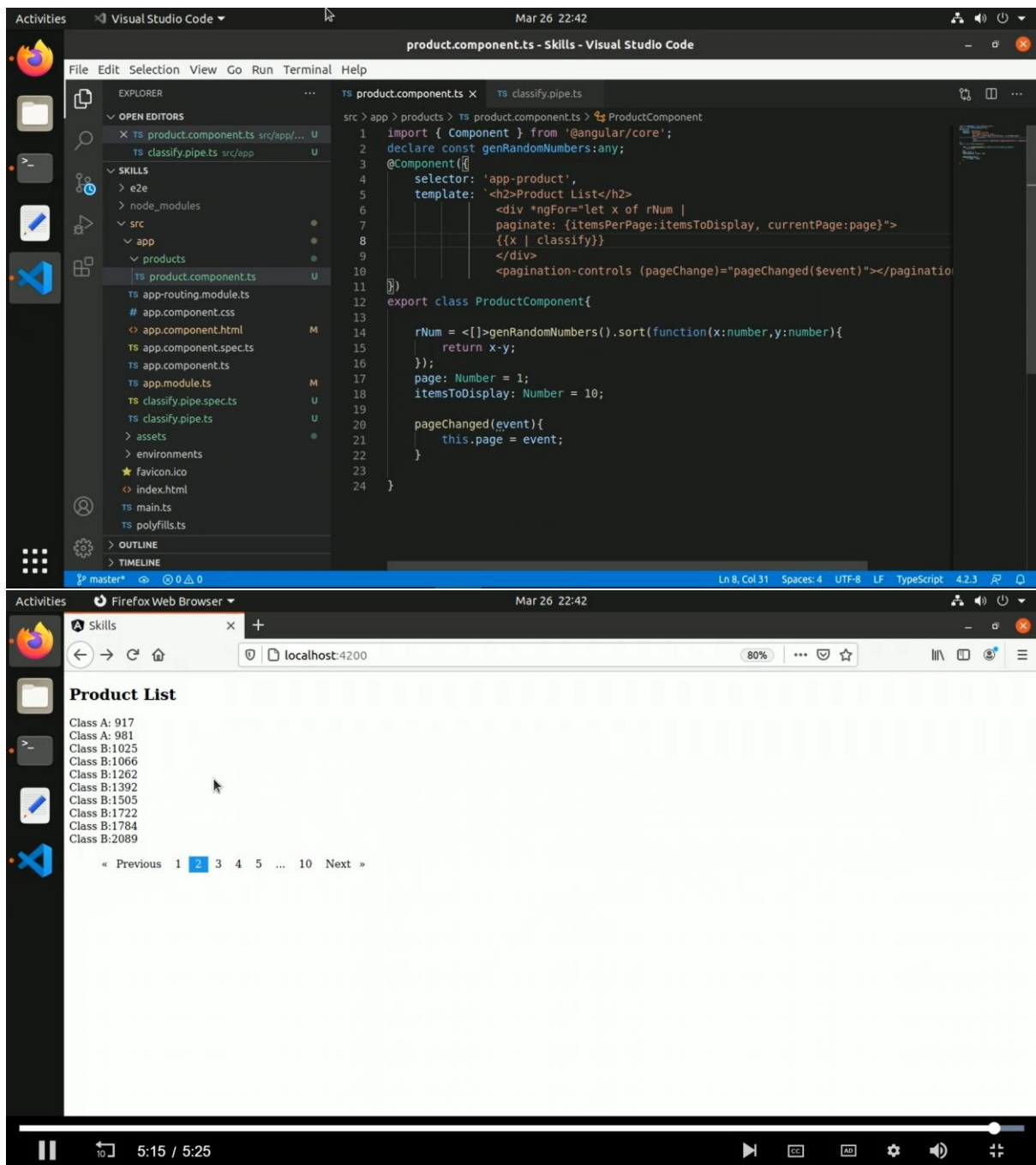
EXPLORER

- OPEN EDITORS
 - TS product.component.ts src/app/...
 - TS classify.pipe.ts src/app
- SKILLS
 - e2e
 - node_modules
 - src
 - app
 - products
 - TS product.component.ts
 - TS app-routing.module.ts
 - # app.component.css
 - app.component.html
 - TS app.component.spec.ts
 - TS app.component.ts
 - TS app.module.ts
 - TS classify.pipe.spec.ts
 - TS classify.pipe.ts
 - assets
 - environments
 - favicon.ico
 - index.html
 - TS main.ts
 - polyfills.ts

src > app > TS classify.pipe.ts > ClassifyPipe > transform

```
1 import { Pipe, PipeTransform } from '@angular/core';
2
3 @Pipe({
4   name: 'classify'
5 })
6 export class ClassifyPipe implements PipeTransform {
7
8   transform(value: string): string {
9     const val = parseInt(value);
10
11     if(val < 1000)
12       return "Class A: " + value
13     else
14       return "Class B:" + value
15   }
16 }
```

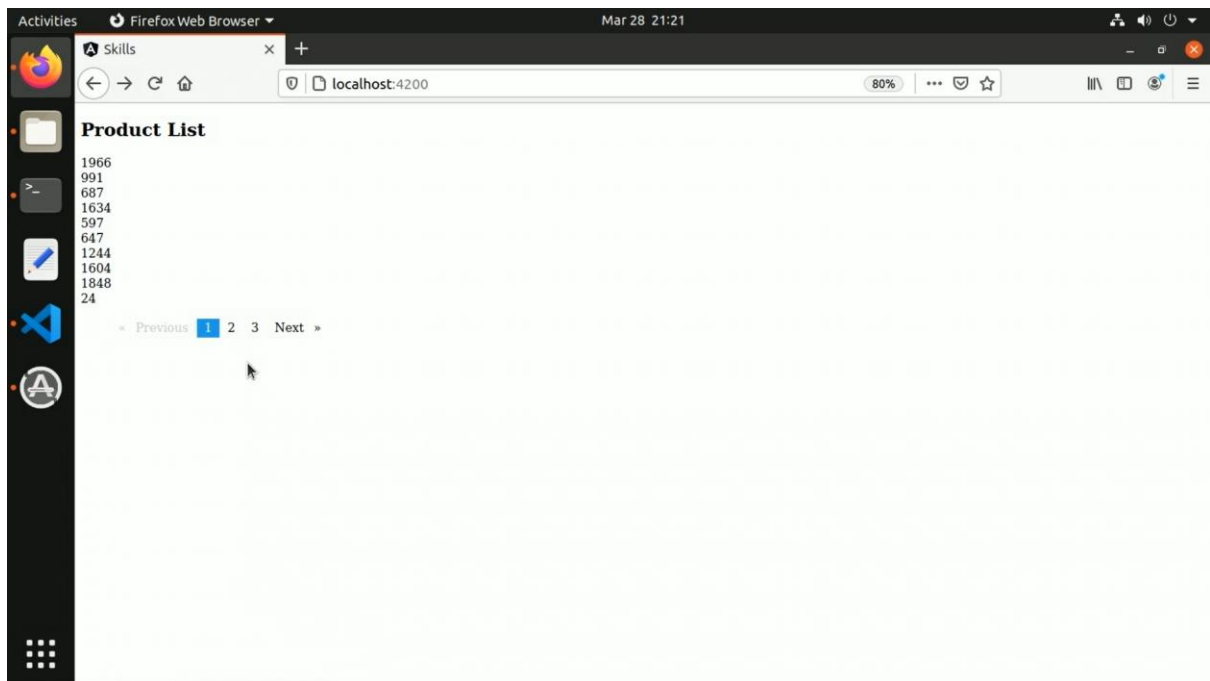
4:38 / 5:25

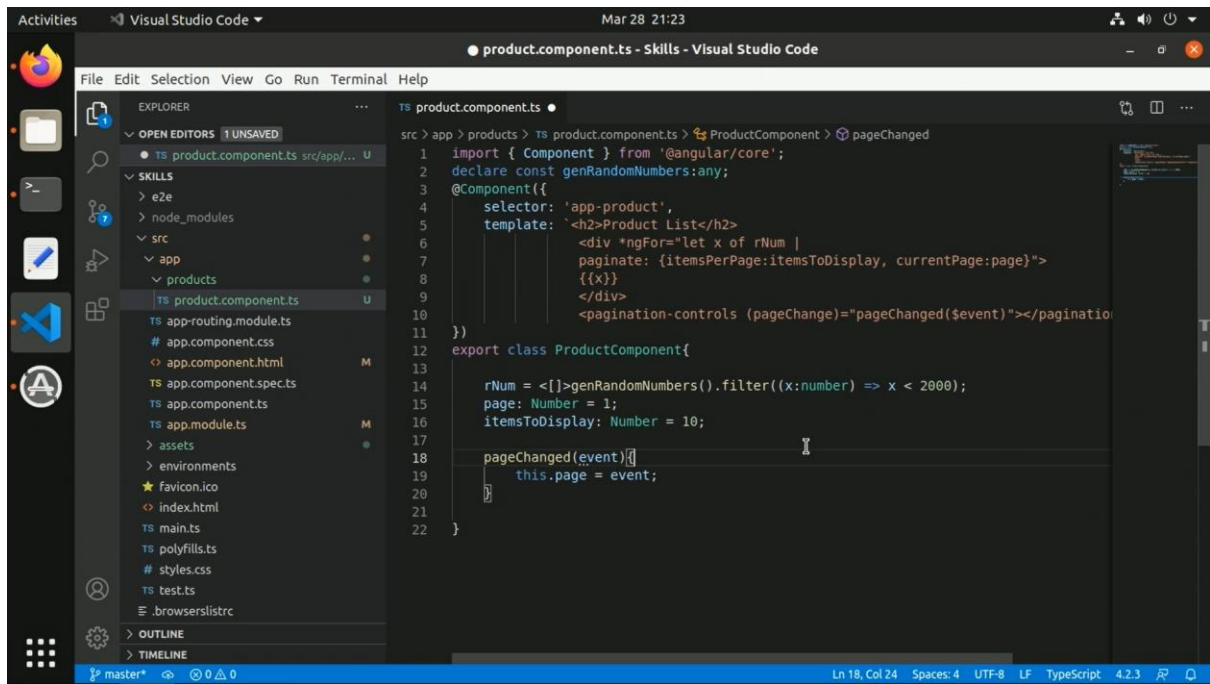


Filtering data in angular

The screenshot shows the Visual Studio Code editor with the file `product.component.ts` open. The Explorer sidebar on the left shows the project structure, including `src/app/products`. The main editor area displays the following TypeScript code:

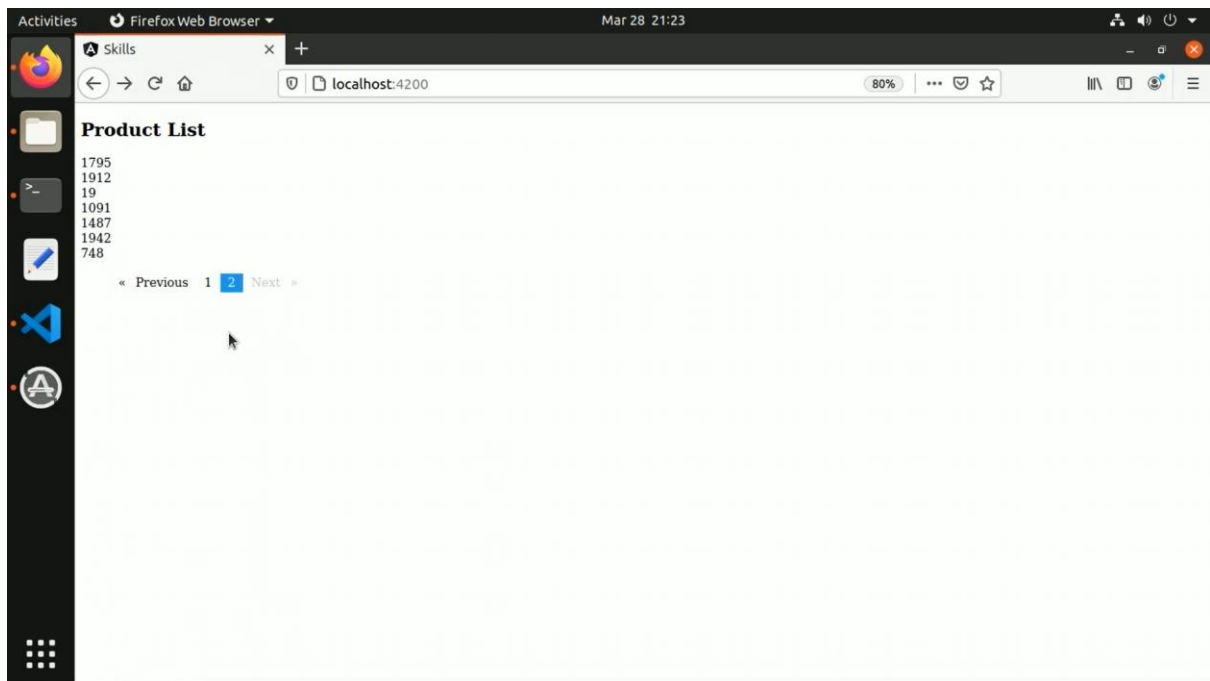
```
src > app > products > TS product.component.ts > ProductComponent > rNum > Filter() callback
1 import { Component } from '@angular/core';
2 declare const genRandomNumbers:any;
3 @Component({
4   selector: 'app-product',
5   template: `<h2>Product List</h2>
6     <div *ngFor="let x of rNum |
7       paginate: {itemsPerPage:itemsToDisplay, currentPage:page}">
8       {{x}}
9     </div>
10   <pagination-controls (pageChange)="pageChanged($event)"></pagination-controls>`
11 })
12 export class ProductComponent{
13
14   rNum = <[]>genRandomNumbers().filter((x => x < 2000));
15   page: Number = 1;
16   itemsToDisplay: Number = 10;
17
18   pageChanged(event){
19     this.page = event;
20   }
21
22 }
```





The screenshot shows the Visual Studio Code editor with the file `product.component.ts` open. The Explorer sidebar on the left shows the project structure, including `src/app/products`. The main editor area displays the following TypeScript code:

```
1 import { Component } from '@angular/core';
2 declare const genRandomNumbers:any;
3 @component({
4   selector: 'app-product',
5   template: `<h2>Product List</h2>
6             <div *ngFor="let x of rNum |
7               paginate: {itemsPerPage:itemsToDisplay, currentPage:page}">
8               {{x}}
9             </div>
10            <pagination-controls (pageChange)="pageChanged($event)"></pagination-controls>`
11 })
12 export class ProductComponent{
13
14   rNum = <[]>genRandomNumbers().filter((x:number) => x < 2000);
15   page: Number = 1;
16   itemsToDisplay: Number = 10;
17
18   pageChanged(event){
19     this.page = event;
20   }
21 }
22
```





Adding Logic to Angular Components

Adding logic to components using "ngIf" and "ngFor"

Iterating through complex objects

Implementing pagination in Angular

Sorting list data with Angular

Creating custom pipes in Angular



1:35 / 1:53



Next Up
Reflect on what you've learned