

Name - Yash Lakhtariya

Enrollment number - 21162101012

Branch - CBA Batch - 41

FET Practical 15

Code Link for all practicals :

<https://github.com/yashlakhtariya/sem4practicals/tree/main/FET>

Objective: To understand the concept of observables in Angular.

Exercise :

Consider a stream of numbers to be generated using an observable, subscribe to the stream and log only the even numbers from the stream on console. You should include next, complete and error methods of the observables.

Structure :

main project : angular_practicals

component : prac15

HTML (prac15.component.html) :

```
<h1> Number streaming from 0 to 50 on console </h1>
<h1> Even numbers of the range are logged (subscribed) </h1>
```

CSS (prac15.component.css) :

```
h1
{
    margin-top: 20%;
    text-align: center;
    color: #b75969;
    font-size: 50px;
    font-weight: bolder;
}
```

Name - Yash Lakhtariya

Enrollment number - 21162101012

Branch - CBA Batch - 41

FET Practical 15

Code Link for all practicals :

<https://github.com/yashslakhtariya/sem4practicals/tree/main/FET>

TS (prac15.component.ts) :

```
import { Component, OnInit } from '@angular/core';
import { Observable } from 'rxjs';

@Component({
  selector: 'app-prac15',
  templateUrl: './prac15.component.html',
  styleUrls: ['./prac15.component.css']
})
export class Prac15Component implements OnInit{
  nmbrs = new Observable<number>((observer) => {
    console.log('Number streaming is started from 0 to 50!');
    let y: number = 0;
    // using the function timeout for demo without specifying timeout
    milliseconds
    setTimeout(() => {
      while(y < 50)
      {
        observer.next(y);
        y++;
      }
      observer.complete();
    });
  });
}
```

Name - Yash Lakhtariya

Enrollment number - 21162101012

Branch - CBA Batch - 41

FET Practical 15

Code Link for all practicals :

<https://github.com/yashslakhtariya/sem4practicals/tree/main/FET>

```
});

ngOnInit()
{
  this.nmbrrs.subscribe({
    next: (n) => {
      if(n % 2 === 0)
      {
        console.log(n);
      }
    },
    error: (err) => {
      console.log(`Error : ${err}`);
    },
    complete: () => {
      console.log('Number streaming completed and even numbers are
logged!');
    }
  })
}
```

Name - Yash Lakhtariya

Enrollment number - 21162101012

Branch - CBA Batch - 41

FET Practical 15

Code Link for all practicals :

<https://github.com/yashslakhtariya/sem4practicals/tree/main/FET>

Output :

