

Two simple REST API with Node and Express

1. Get sum of two numbers with parameters n1 and n2
2. Save Employee

```

////////////////////////////////////// START YOU CODE HERE ////////////////////////////////////////

//Call from browser with : http://localhost:3000/api/sum?n1=10&n2=15

router.get('/sum', (request, response) => {

    n1 = Number(request.query.n1);
    n2 = Number(request.query.n2);
    sum = n1 + n2;

    response.json(sum);
});

router.post('/saveEmployee', function (request, response) {
    saveToDataBase(request.body)
    return response.send(request.body);
});

//Simple function to save to database
function saveToDataBase(data) {
    console.log(data);
}

////////////////////////////////////// END YOU CODE HERE ////////////////////////////////////////

```

- what is REST API
- what is post method
- what is get method
- what is url
- what is query string

Angular Client Application

Component html form to accept user input

```
<div style="text-align:center">
  <h1>
    | Welcome to {{ title }}!
  </h1>

  <label>Number 1</label>
  <input type="text" [(ngModel)]="n1" />
  <br>
  <br>
  <label>Number 2</label>
  <input type="text" [(ngModel)]="n2" />
  <br>
  <br>
  <label>Sum = {{sum}}</label>
  <br>
  <br>

  <button (click)="getSum()">Get Sum</button>
```

Component class in typescript to handle user actions.

```
export class AppComponent {

  n1 = undefined;

  n2 = undefined;

  sum = undefined;

  constructor(private http: HttpClient) {

  }

  getSum() {

    const params = new HttpParams().set('n1', this.n1).set('n2', this.n2);

    this.http.get('http://localhost:3000/api/sum', { params: params }).subscribe(sum => {
      console.log(sum);
      this.sum = sum;
    });

  }

}
```

on clicking button the getSUM method will be called , which call the Rest API to get sum of n1 and n2