App.routes.ts

```
import { CanDeactivate } from '@angular/router';
import { HomeComponent } from "./home.component":
import { AboutComponent } from "./about.component";
import { RegisterComponent } from "./register.component";
import { userListComponent } from "./userList.component";
import { EditUserComponent } from './editUser.component';
import { LoginComponent } from "./login.component";
import { ProtectedGaurd } from './protectdata.guard';
import { AuthGaurd } from './auth.gaurd';
export const routes=[
  {path:"home",component:HomeComponent},
 {path:"about", component:AboutComponent},
 {path:"login", component:LoginComponent},
 {path:"register",component:RegisterComponent,canDeactivate:[ProtectedGaurd]},
 {path:"userList",component:userListComponent,canActivate:[AuthGaurd]},
 {path:"editUser/:userId",component:EditUserComponent},
 {path:"",component:RegisterComponent}
```

Auth.gaurd.ts

```
import { CanActivate, Router } from '@angular/router';
import { Injectable } from "@angular/core";
@Injectable()
export class AuthGaurd implements CanActivate{
   constructor(private router:Router){}
   canActivate():boolean{
     var data = localStorage.getItem("user");
     if(data){
        return true;
     }
     else{
        this.router.navigate(['/login']);
        return false;
     }
   }
}
```

```
import { Injectable } from '@angular/core';
import { ActivatedRouteSnapshot, CanActivate, RouterStateSnapshot, Router} from
'@angular/router";
import { AuthService } from './auth.service';
@Injectable()
export class securityGaurd implements CanActivate(
//canActivate(route:ActivatedRouteSnapshot,state:RouterStateSnapshot,component:Lo
ginComponent){
   constructor(public auth:AuthService,public route:Router){}
   canActivate():boolean{
     if(!this.auth.authenticate()){
       this.route.navigate(['/login']);
       return false;
     else
       return true;
     3
 3
```

Register.component.ts

```
import { Component } from "@angular/core";
import { CommonService } from "./common.service";
import { User } from "./user";
import { Router } from "@angular/router";

@Component({
    selector:"register",
    templateUrl:"./register.component.html",
    styleUrls: ['../assets/vzbootstrap/styles/bootstrap.min.css',
'../assets/vzbootstrap/styles/vzbootstrap-main.min.css',
'../assets/styles/styles.css']
})
export class RegisterComponent{
    user:User;
```

```
access:boolean = true;
  constructor(private cs:CommonService,private router:Router){
    this.user = new User();
}
  register(){
    this.access =false;
    this.cs.registerUser(this.user).subscribe((data)=>{
        if(data){
        this.router.navigate(['/userList']);
      }
  });
}
```

//login.component.ts

```
login() {
    this.access = false;

localStorage.setItem("user", "chandra");
    this.router.navigate(['/userList']);
}
```

//userList.component.ts

```
logout(){
    localStorage.removeItem('user');
    this.router.navigate(['/login']);
}
```

3|Gaurds