Created two modules:

App.module.ts is main module

Admin.module.ts is sub module

```
//app.module.ts
import { LoginComponent } from './login.component';
import { FooterComponent } from './footer.component';
import { routes } from './app.routes';
import { BrowserModule } from '@angular/platform-browser';
import { NgModule } from '@angular/core';
import { RouterModule } from "@angular/router";
import { FormsModule } from "@angular/forms";
import { HttpClientModule, HTTP_INTERCEPTORS } from "@angular/common/http";
import { AppComponent } from './app.component';
import { HomeComponent } from './home.component';
import { AboutComponent } from './about.component';
import { RegisterComponent } from './register.component';
import { MenuComponent } from './menu';
import { UserService } from './user.service';
import { UserListComponent } from './userList.component';
import { EditUserComponent } from './editUser.component';
import { ProtectDataGaurd } from './protectData.gaurd';
import { HashLocationStrategy, LocationStrategy } from '@angular/common';
import { AuthGaurd } from './auth.gaurd';
import { CapitalPipe } from './capital.pipe';
import { ColorDirective } from './colorDirective';
import { DisableInputDirective } from './disableInputDirective';
import { AuthService } from './auth.service';
import { AdminModule } from './admin/admin.module';
import { AuthInterceptor } from './auth.interceptor';
@NgModule({
  declarations: [
    AppComponent, HomeComponent, AboutComponent, RegisterComponent,
MenuComponent, FooterComponent, LoginComponent, UserListComponent,
EditUserComponent, CapitalPipe, ColorDirective, DisableInputDirective
  1,
  imports: [
    BrowserModule, RouterModule.forRoot(routes), FormsModule, HttpClientModule,
AdminModule
  l,
  providers: [
```

```
{
    provide: HTTP_INTERCEPTORS,
    useClass: AuthInterceptor,
    multi: true
},
{
    provide: LocationStrategy,
    useClass: HashLocationStrategy
},
UserService, ProtectDataGaurd, AuthGaurd, AuthService,
],
bootstrap: [AppComponent],
    exports: [RouterModule]
})
export class AppModule { }
```

```
//admin.module.ts
import { AdminLoginComponent } from './adminLogin.component';
import { NgModule } from "@angular/core";
import { AdminClientComponent } from "./adminclient.component";
import { AdminHomeComponent } from "./adminhome.component";
import { AdminContactComponent } from "./admincontact.component";
import { RouterModule } from "@angular/router";
import { adminRoutes } from "./admin.routes";
import { CommonModule } from "@angular/common";
import { AdminForgotPasswordComponent } from './adminForgotPassword';
import { AdminMenu } from './adminMenu';
@NgModule({
 imports:[RouterModule.forChild(adminRoutes),CommonModule],
  providers:[],
declarations: [AdminClientComponent, AdminHomeComponent, AdminContactComponent, Admin
LoginComponent, AdminForgotPasswordComponent, AdminMenul,
 exports: [RouterModule]
export class AdminModule{
```

```
import { CanDeactivate } from '@angular/router';
import { Component } from '@angular/core';
import { LoginComponent } from "./login.component";
```

2 | Lazy loading

```
//app.routes.ts
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 { ProtectDataGaurd } from './protectData.gaurd';
import { AuthGaurd } from './auth.gaurd';
export const routes = [
  { path: "home", component: HomeComponent },
 { path: "about", component: AboutComponent },
  { path: "register", component: RegisterComponent, canDeactivate:
[ProtectDataGaurd] },
  { path: "login", component: LoginComponent },
 { path: "userList", component: UserListComponent, canActivate: [AuthGaurd] },
 { path: "edituser/:userId", component: EditUserComponent, canActivate:
[AuthGaurd] },
 { path: "", loadChildren: './admin/admin.module#AdminModule' }// this is for
lazy loading, in this case admin empty route will call by default
```