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app.component.css

```
h1 {
           color: rgb(29, 45, 54);
           margin-top: auto;
           text-align: center;
       }
       input {
           font-size: 15px;
           padding: 10px 5px;
           margin: 5px 1px;
           box-sizing: border-box;
           border-radius: 10px;
       }
       p{
           text-align: center;
       }
       button {
           border: 0;
           line-height: 2.5;
           padding: 0 20px;
           text-align: center;
           color: #000000;
           text-shadow: 1px 1px 1px #F0D9FF;
           border-radius: 10px;
           background-color: rgb(247, 32, 4);
           font-size: 16px;
           background-image: linear-gradient;
           box-shadow: inset 2px 2px 3px rgba(255, 255, 255, .6),
           inset -2px -2px 3px rgba(0, 0, 0, .6);
       }
       button:active {
           box-shadow: inset -2px -2px 3px rgba(255, 255, 255, .6);
          }
```

```
button:hover {
    background-color: rgb(121, 255, 139);
}

.button {
    text-align: right;
}
body {
    background-color: #F0D9FF;
    border-radius: 10px;
}
.example-spacer {
    flex: 1 1 auto;
}
```

app.component.html

```
<!DOCTYPE
html>
           <html lang="en">
           <head>
               </head>
           <body>
                  <mat-toolbar color="primary">
                        <mat-toolbar-row>
                          <span> MY CALCULATOR </span>
                          <span class="material-icons">verified user</span>
                          <span class="example-spacer"></span>
                          <button class="button" onClick="window.location.reload()"</pre>
           mat-flat-button>Refresh</putton>
                        </mat-toolbar-row>
                  </mat-toolbar>
                 <mat-card><div style="text-align:center">
                  <h1> CALCULATOR (h1>
```

```
<input type="number" name="number1" [(ngModel)]="number1"</pre>
placeholder="ENTER 1st NUMBER">
        <input type="number" name="number2" [(ngModel)]="number2"</pre>
placeholder="ENTER 2nd NUMBER">
        <br>
        <button (click)="add()">ADDITION </button>
        <button (click)="sub()">SUBSTRACTION </button>
        <button (click)="mul()">MULTIPLICATION </button>
        <button (click)="div()">DIVISION </button>
        <button (click)="fac()">FACTORIAL</putton>
        <button (click)="prime()">PRIME </button>
        <br>
        <h3>RESULT: {{number3}}</h3>
        <h3>RESULT FOR PRIME : {{number4 ? "true" : "false"}}</h3>
    </div></mat-card>
</body>
</html>
```

app.component.spec.ts

```
import { TestBed } from
'@angular/core/testing';
import { RouterTestingModule } from
'@angular/router/testing';
import { AppComponent } from './app.component';

describe('AppComponent', () => {
    beforeEach(async () => {
        await TestBed.configureTestingModule({
        imports: [
            RouterTestingModule
        ],
        declarations: [
            AppComponent
        ],
```

```
}).compileComponents();
 });
 it('should create the app', () => {
    const fixture = TestBed.createComponent(AppComponent);
   const app = fixture.componentInstance;
   expect(app).toBeTruthy();
 });
 it(`should have as title 'calculator'`, () => {
    const fixture = TestBed.createComponent(AppComponent);
   const app = fixture.componentInstance;
   expect(app.title).toEqual('calculator');
 });
 it('should render title', () => {
    const fixture = TestBed.createComponent(AppComponent);
   fixture.detectChanges();
   const compiled = fixture.nativeElement as HTMLElement;
   expect(compiled.querySelector('.content
span')?.textContent).toContain('calculator app is running!');
 });
});
```

app.component.ts

```
add(){
    this.number3=this.number1+this.number2;
  }
  sub(){
    this.number3=this.number1-this.number2;
  }
  mul(){
   this.number3=this.number1*this.number2;
  }
  div(){
    this.number3=this.number1/this.number2;
  }
  fac(){
    for (let p = 1; p <= this.number1; p++) {</pre>
      this.number3 = this.number3 * p;
  }
  }
    prime(){
    let n = 0;
    let i, flag = true;
    for (i = 2; i < this.number1; i++) {</pre>
        if (this.number1% i == 0) {
            flag = false;
            break;
        }
    }
    if (flag === true) {
        this.number4= 1;
    } else {
      this.number4= 0;
    }
  }
}
```

app.module.ts

```
import {
NgModule } from
'@angular/core';
                   import { BrowserModule } from '@angular/platform-browser';
                   import { FormsModule } from '@angular/forms';
                   import { BrowserAnimationsModule } from '@angular/platform-
                   browser/animations';
                   import { AppRoutingModule } from './app-routing.module';
                   import { AppComponent } from './app.component';
                   import {MatButtonModule} from '@angular/material/button';
                   import {MatToolbarModule} from '@angular/material/toolbar';
                   import {MatCardModule} from '@angular/material/card';
                   import {MatIconModule} from '@angular/material/icon';
                   @NgModule({
                     declarations: [
                       AppComponent
                     ],
                     imports: [
                       BrowserModule,
                       AppRoutingModule,
                       FormsModule,
                       BrowserAnimationsModule,
                       MatButtonModule,
                       MatToolbarModule,
                       MatCardModule,
                       MatIconModule
                     ],
                     providers: [],
                     bootstrap: [AppComponent]
                   })
                   export class AppModule { }
```

material.module.ts

```
import {
NgModule } from
'@angular/core';
```

```
import {
    MatButtonModule,
    MatMenuModule,
    MatIconModule,
    MatCardModule,
    MatSidenavModule,
    MatFormFieldModule,
    MatInputModule,
    MatTooltipModule,
    MatToolbarModule
} from '@angular/material';
@NgModule({
    imports: [
        MatButtonModule,
        MatMenuModule,
        MatIconModule,
        MatCardModule,
        MatSidenavModule,
        MatFormFieldModule,
        MatInputModule,
        MatTooltipModule,
        MatToolbarModule,
    ],
    exports: [
        MatButtonModule,
        MatMenuModule,
        MatIconModule,
        MatCardModule,
        MatSidenavModule,
        MatFormFieldModule,
        MatInputModule,
        MatTooltipModule,
        MatToolbarModule
    ]
})
export class MaterialModule { }
```

app-routing.module.ts

```
import {
NgModule } from
'@angular/core';
    import { RouterModule, Routes } from '@angular/router';

    const routes: Routes = [];

    @NgModule({
        imports: [RouterModule.forRoot(routes)],
        exports: [RouterModule]
    })
    export class AppRoutingModule { }
```







