SCRIPTING LAB ASSIGNMENT

```
<div class="form">
   <h2><span class="multicolortext">Simple calculator</span></h2>
   <div class="button">
      <button (click)="addnum()">Add</button>
      <button (click)="subnum()">Subtract</button><br>
      <button (click)="multinum()">Multiply</button>
      <button (click)="divnum()">Divide</button><br>
      <button (click)="factnum1()">Factorial of num 1</button>
      <button (click)="factnum2()">Factorial of num 2</button><br>
      <button (click)="primenum1()">Prime checker for num 1</button>
      <button (click)="primenum2()">Prime checker for num 2</button>
   </div>

   <p class="num1">First number is : {{a}}</p>
   <p class="num1">Second number is : {{b}}</p>

   <p class="num2">Note :- <br>(i) Result shown below after reloding the page is incorrect. So press the button for correct answer.<br>(ii)Don't press Factoria
l button twice.</p>

   <p class="num3">The sum of 2 numbers --- {{c1}} <br> The difference of 2 numbers --- {{c2}} <br> The product of 2 numbers --
- {{c3}} <br> The quotient of 2 numbers --- {{c4}}</p>
   <p class="num3">Factorial of {{a}} --- {{fac1}} <br> Factorial of {{b}} --- {{fac2}}</p>
   <p *ngIf="count1 == 0 ;else not_prime1" class="num3">{{a}} is a prime number.</p>
   <p *ngIf="count2 == 0 ;else not_prime2" class="num3">{{b}} is a prime number.</p>
   <ng-template #not_prime1><p class="num3">{{a}} is not a prime number</p></ng-template>
   <ng-template #not_prime2><p class="num3">{{b}} is not a prime number</p></ng-template>
</div>
```

```
.form
```

```
{
    padding: 10px 100px 10px 100px;
    background-color: black;
    overflow: auto;
}
.multicolortext
{
    padding-left: 450px;
    padding-right: 400px;
    font-size: 50px;
    background-image: linear-
gradient(to left, rgb(247, 90, 247), rgb(86, 3, 146), rgb(0, 150, 0), rgb(23, 23, 255), rgb(255, 255, 35), rgb(255, 167, 4), rgb(255, 5, 5));
    -webkit-background-clip: text;
    -moz-background-clip: text;
    background-clip: text;
    color: transparent;
}
.num1
{
    color: chartreuse;
    font-size: 20px;
}
.num2
{
    color: red;
    font-size: 20px;
}
.num3
{
    color: chartreuse;
    font-size: 20px;
}
button
{
    width: 150px;
    height: 90px;
```

```
    padding: 5px;
    margin: 10px;
    transition-duration: 0.5s;
    font-size: 20px;
    font-weight: bold;
}
button:hover
{
    background-color: #ffee00;
    color: #000000;
}
.button
{
    border: 5px solid gold;
    padding: 5px;
    width: 340px;
    height: auto;
    float: right;
}
```

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'My App Component';
  a = 19;
  b  =  12;
  c1 = {};
```

```
c2 = {};
c3 = {};
c4 = {};
fac1 = 1;
fac2 = 1;
count1 = 0;
count2 = 0;
addnum()
{
  this.c1 = this.a + this.b;
}
subnum()
{
  this.c2 = this.a - this.b;
}
multinum()
{
  this.c3 = this.a * this.b;
}
divnum()
{
  this.c4 = this.a / this.b
}
factnum1()
{
  for(let i = 1; i <= this.a; i++)
  {
    this.fac1 = this.fac1 * i;
  }
}
factnum2()
{
  for(let i = 1; i <= this.b; i++)
  {
    this.fac2 = this.fac2 * i;
  }
```

```
  }
  primenum1()
  {
    for(let i = 2; i<= (this.a)/2; i++)
    {
      if (this.a % i == 0)
      {
        this.count1 = 1;
        break;
      }
    }

  }
  primenum2()
  {
    for(let i = 2; i<= (this.b)/2; i++)
    {
      if (this.b % i == 0)
      {
        this.count2 = 1;
        break;
      }
    }
  }
}
```

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

```
const routes: Routes = [];

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

```
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 'my-first-app'`, () => {
    const fixture = TestBed.createComponent(AppComponent);
```

```
    const app = fixture.componentInstance;
    expect(app.title).toEqual('my-first-app');
  });

  it('should render title', () => {
    const fixture = TestBed.createComponent(AppComponent);
    fixture.detectChanges();
    const compiled = fixture.nativeElement as HTMLElement;
    expect(compiled.querySelector('.content span')?.textContent).toContain('my-first-app app is running!');
  });
});
```

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';

import { AppRoutingModule } from './app-routing.module';
import { AppComponent } from './app.component';

@NgModule({
  declarations: [
  AppComponent
  ],
  imports: [
    BrowserModule,
    AppRoutingModule
  ],
  providers: [],
  bootstrap: [AppComponent]
})
export class AppModule { }
```

First number is : 19

Second number is : 12

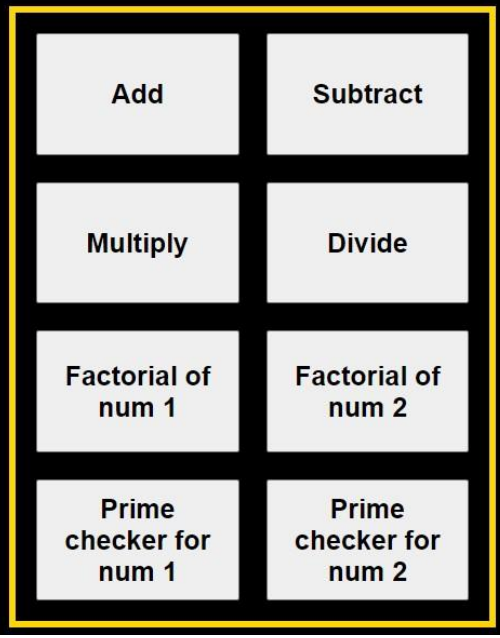
Note :-
(i) Result shown below after reloding the page is incorrect. So press the button for correct answer.
(ii)Don't press Factorial button twice.

The sum of 2 numbers --- 31
The difference of 2 numbers --- 7
The product of 2 numbers --- 228
The quotient of 2 numbers --- 1.5833333333333333

Factorial of 19 --- 121645100408832000
Factorial of 12 --- 479001600

19 is a prime number.

12 is not a prime number



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