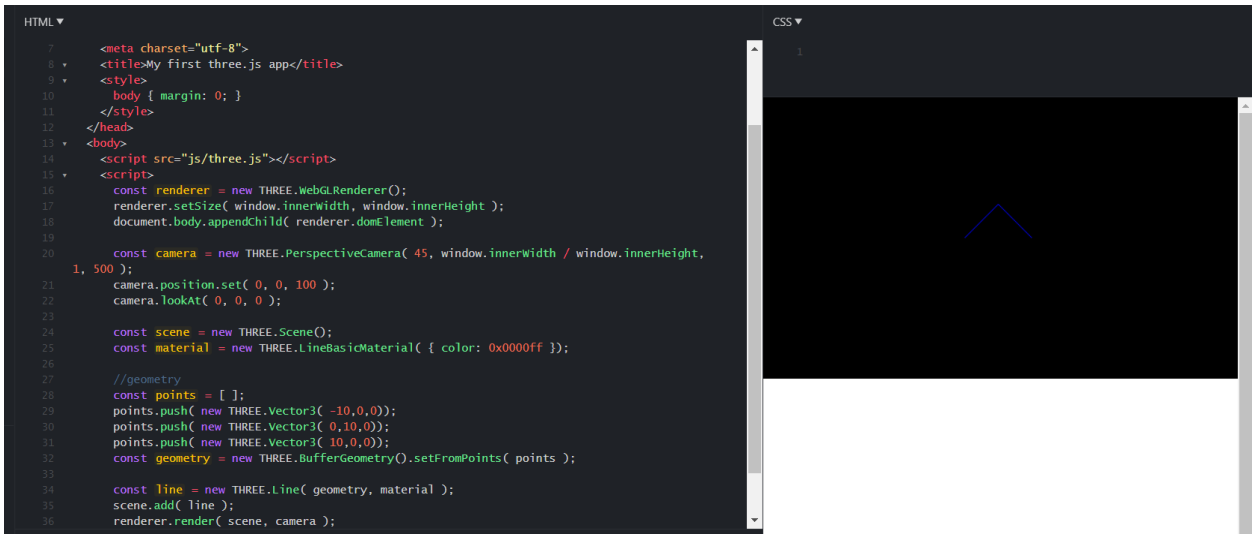
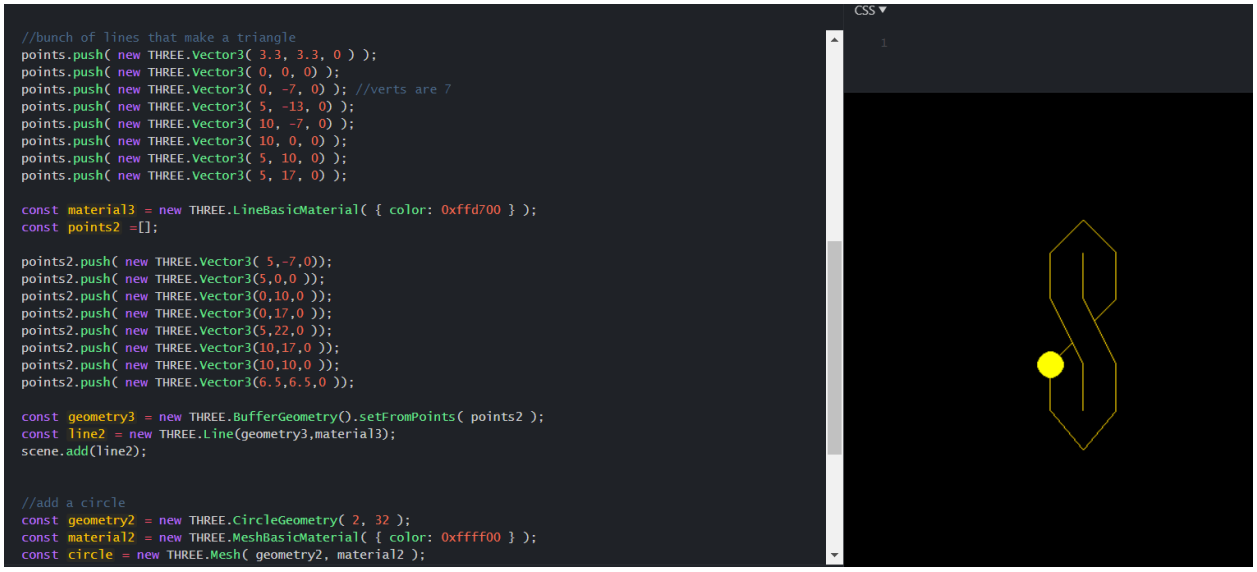
Problem #1

--Task #1:



```
HTML
    <meta charset="utf-8">
    <title>My first three.js app</title>
    <style>
      body { margin: 0; }
    </style>
  </head>
  <body>
    <script src="js/three.js"></script>
    <script>
      const renderer = new THREE.WebGLRenderer();
      renderer.setSize( window.innerWidth, window.innerHeight );
      document.body.appendChild( renderer.domElement );

      const camera = new THREE.PerspectiveCamera( 45, window.innerWidth / window.innerHeight,
1, 500 );
      camera.position.set( 0, 0, 100 );
      camera.lookAt( 0, 0, 0 );

      const scene = new THREE.Scene();
      const material = new THREE.LineBasicMaterial( { color: 0x0000ff });

      //geometry
      const points = [ ];
      points.push( new THREE.Vector3( -10,0,0));
      points.push( new THREE.Vector3( 0,10,0));
      points.push( new THREE.Vector3( 10,0,0));
      const geometry = new THREE.BufferGeometry().setFromPoints( points );

      const line = new THREE.Line( geometry, material );
      scene.add( line );
      renderer.render( scene, camera );
```

--Task #2:



```
//bunch of lines that make a triangle
points.push( new THREE.Vector3( 3.3, 3.3, 0 ) );
points.push( new THREE.Vector3( 0, 0, 0) );
points.push( new THREE.Vector3( 0, -7, 0) ); //verts are 7
points.push( new THREE.Vector3( 5, -13, 0) );
points.push( new THREE.Vector3( 10, -7, 0) );
points.push( new THREE.Vector3( 10, 0, 0) );
points.push( new THREE.Vector3( 5, 10, 0) );
points.push( new THREE.Vector3( 5, 17, 0) );

const material3 = new THREE.LineBasicMaterial( { color: 0xffd700 } );
const points2 =[];

points2.push( new THREE.Vector3( 5,-7,0));
points2.push( new THREE.Vector3(5,0,0 ));
points2.push( new THREE.Vector3(0,10,0 ));
points2.push( new THREE.Vector3(0,17,0 ));
points2.push( new THREE.Vector3(5,22,0 ));
points2.push( new THREE.Vector3(10,17,0 ));
points2.push( new THREE.Vector3(10,10,0 ));
points2.push( new THREE.Vector3(6.5,6.5,0 ));

const geometry3 = new THREE.BufferGeometry().setFromPoints( points2 );
const line2 = new THREE.Line(geometry3,material3);
scene.add(line2);


//add a circle
const geometry2 = new THREE.CircleGeometry( 2, 32 );
const material2 = new THREE.MeshBasicMaterial( { color: 0xffff00 } );
const circle = new THREE.Mesh( geometry2, material2 );
```

Problem #2

--Task #2:

https://github.com/wesleygarnes/csc322fa21