Installing ContainerLab

```
curl -sL https://containerlab.dev/setup | sudo -E bash -s "all"
```

Getting the cEOS image

Arista requires to register with arista.com before downloading any images. Once I created my account, I went to the software downloads section and download ceos64 tar archive.

Once downloaded, import the archive with docker:

```
docker import cEOS64-lab-4.32.0F.tar.xz ceos:4.32.0F
```

Getting the Ubuntu Image

I used Docker's built-in image for this task, so there was no need for any additional installations.

Step 1: Created a **Dockerfile** in the current working directory.

```
FROM ubuntu:20.04
RUN apt-get update && \
        apt-get install -y iputils-ping net-tools
```

Step 2: Import it in docker.

```
sudo docker build -t my-custom-ubuntu .
```

Once it's imported, I used this image in my yaml file. This is how my yaml file looks:

```
name: Lab1

topology:
```

```
kinds:
        arista_ceos:
        image:  ceos:4.32.2F
        linux:
        image:  my-custom-ubuntu
nodes:
        r1:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/r1.cfg
        r2:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/r2.cfg
        r3:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/r3.cfg
        r4:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/r4.cfg
        r5:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/r5.cfg
        s1:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/s1.cfg
        s2:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/s2.cfg
        s3:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/s3.cfg
        s4:
        kind: arista_ceos
        startup-config: /home/student/git/cfgs/s4.cfg
        s5:
        kind: arista_ceos
        h1:
        kind: linux
        h2:
        kind: linux
        h3:
        kind: linux
        h4:
        kind: linux
```

```
        webserver:
        kind: linux
        nmas:
        kind: linux

links:
        - endpoints:  ["h1:eth1", "s1:eth1"]
        - endpoints:  ["h2:eth1", "s1:eth2"]
        - endpoints:  ["h3:eth1", "s2:eth1"]
        - endpoints:  ["h4:eth1", "s2:eth2"]
        - endpoints:  ["s1:eth3", "s2:eth3"]
        - endpoints:  ["s1:eth4", "r1:eth1"]
        - endpoints:  ["s2:eth4", "r2:eth1"]
        - endpoints:  ["r1:eth2", "s3:eth2"]
        - endpoints:  ["r2:eth2", "s4:eth2"]
        - endpoints:  ["s3:eth1", "s4:eth1"]
        - endpoints:  ["s3:eth3", "r3:eth2"]
        - endpoints:  ["s4:eth3", "r4:eth2"]
        - endpoints:  ["r3:eth3", "r5:eth1"]
        - endpoints:  ["r4:eth3", "r5:eth2"]
        - endpoints:  ["r3:eth1", "r4:eth1"]
        - endpoints:  ["r5:eth3", "webserver:eth3"]
        - endpoints:  ["s5:eth10", "nmas:eth1"]
        - endpoints:  ["s5:eth1", "s1:eth5"]
        - endpoints:  ["s5:eth2", "s2:eth5"]
        - endpoints:  ["s5:eth3", "r1:eth4"]
        - endpoints:  ["s5:eth4", "r2:eth4"]
        - endpoints:  ["s5:eth5", "s3:eth4"]
        - endpoints:  ["s5:eth6", "s4:eth4"]
        - endpoints:  ["s5:eth7", "r3:eth4"]
        - endpoints:  ["s5:eth8", "r4:eth4"]
        - endpoints:  ["s5:eth9", "r5:eth4"]
```

Deploying the lab

```
sudo clab deploy -t ceos.yaml
```