Container Optimized OS for VMs:

If you want to create containers directly on the Google Compute VMs then Google recommends something called as: Container-Optimized OS for hosting docker containers on the GCE.

Container-Optimized OS is an operating system image for your Compute Engine VMs that is optimized for running Docker containers, and is Google's recommended OS for running containers on Google Cloud.

- Preinstalled Docker
- Automatic Updates
- Locked down - you cannot install 3rd party kernel modules
- More secured and less potential risk of attacks.

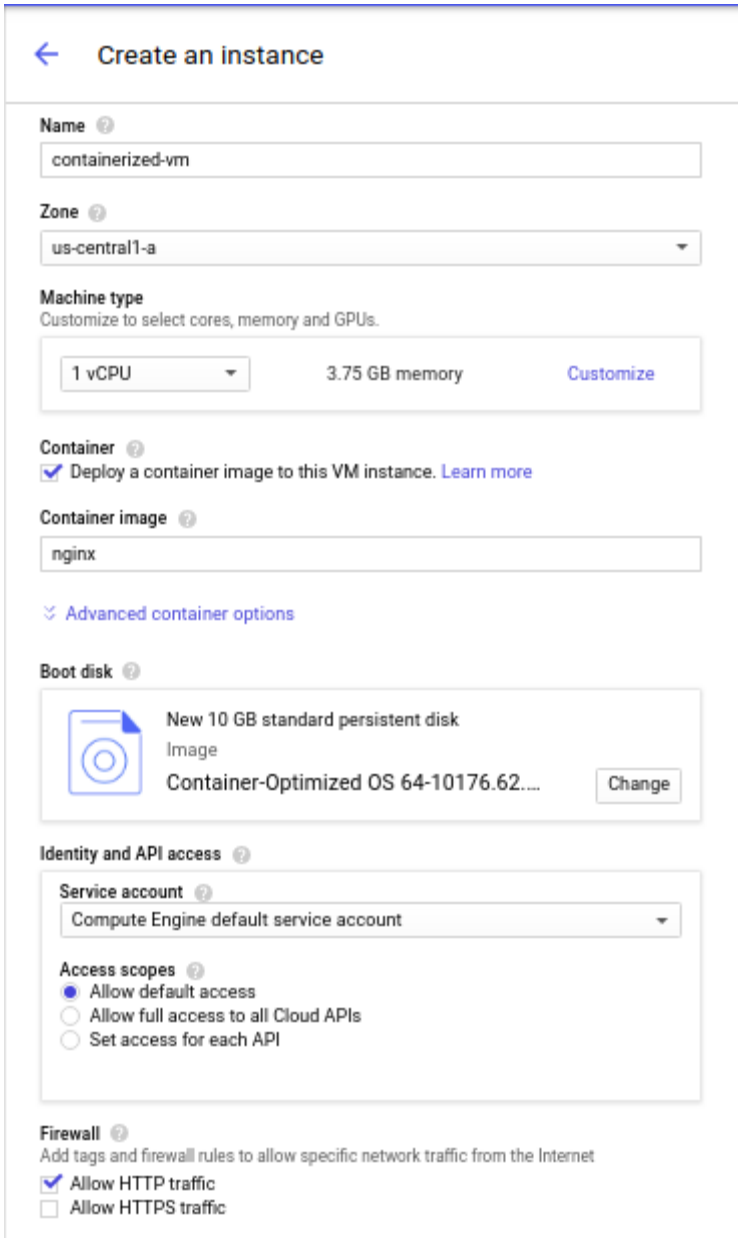
Home work demo to create COS VM in Google Cloud:

Google console:

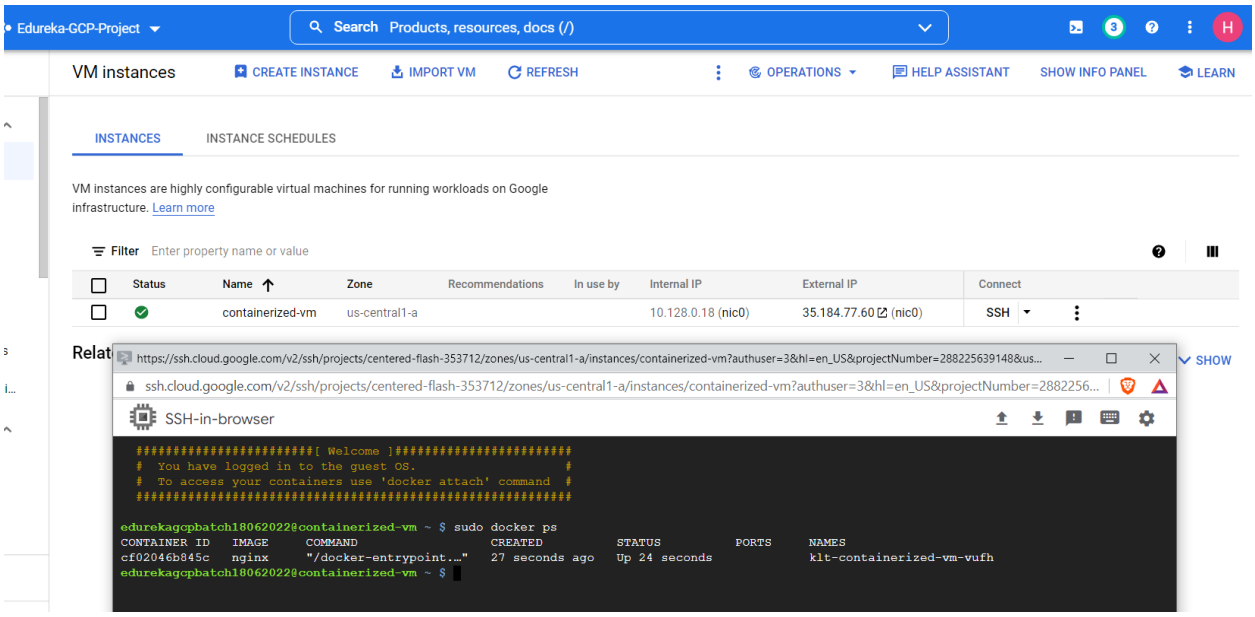
1. Compute Engine > VM instances, then click on Create
2. Fill details like below:

Name	containerized-vm
Zone	us-central1-a
Machine Type	1 vCPU This is a (n1-standard-1), 3.75GB RAM instance
Container	Check the box labeled Deploy a container image to this instance
Container Image	nginx
Boot disk	Container-Optimized OS (default value)
Firewall	Check Allow HTTP traffic

3. Screenshot:



4. Click Create
5. Open SSH session of the VM
6. Run: sudo docker ps



7. Check browser: http://EXTERNAL_IP_OF_VM

   Screenshot: