Tasks
1. Using Terraform, and on Oracle Cloud Infrastructure (OCI), build a hop and spoke network and all of its necessary components.
2. Provision an application VM with Nuxt.js as a frontend and Laravel as a backend.
3. Provision a database VM with MySQL, Redis and Mongo.
4. Setup an automated CI/CD deployment using Jenkins.
5. Use Ansible to install and configure all systems.

Infrastructure and Assumptions
1. A VM for setup of terraform and ansible.
2. Using Ansible, I want to perform task 2, 3 and 4.
3. A second VM (app-vm) will be used to setup MySQL, Redis and Mongo Databases.
4. A third VM (db-vm) will be used to setup three applications.
   A. one frontend app using Nuxt.js
   B. one backend app using Laravel
   C. one microservice app deployed using automated CI/CD with Jenkins and Kubernetes (one node for Kubernetes)
5. Frontend and backend can be exposed using nginx or with ingress in Kubernetes (domains and SSL certs will be required). I have included an nginx in my ansible playbook.
6. For task1, using a dynamic routing gateway (DRG) and remote peering connections (RPCs) is not included in the Free Tier and will incur costs so I will setup a basic network.
7. For task4, I am assuming that a docker image for the microservice (java app) is already uploaded to a docker registry.