Scenario

You will start to work in a new company as a DevOps Engineer. The first project has been assigned to you. For this project, they want from you to implement a Local Kubernetes cluster.

Requirements:

- All resources must be managed by a local git repository.
- Ansible Playbook should be prepared to install required software and dependencies.
- Environment provisioning should be completed with Terraform.
- You should create two services (Producer, Consumer) with Go.
- RabbitMQ and services should be deployed to Local Kubernetes cluster with Helm charts.
- The environment should build via Jenkinsfiles.
  - Services should build with Jenkinsfile and publish to docker hub.
  - RabbitMQ and services should deploy with a parameterized Jenkinsfile.
  - Environment provision should be done with separated Jenkinsfile.
- All configurations should be reproducible on the empty Ubuntu virtual machine.
- Virtual machine can be provisioned by vagrant with VirtualBox driver.
- All content should be packed as a single zip archive.

Acceptance Criteria:

- The solution idea
- Structure of source code and other files (Scripts, configurations, etc.) should follow the preferred naming convention.
- Simple usage instructions should be in the repository as a README file.