* Set up and configure a Jenkins server (20 points)
  + Verification: The student must be able to show their server working with all necessary tools installed - git, docker, kubectl, any appropriate Cloud CLI (e.g. gcloud if on Google)
* Use Terraform to create a Kubernetes cluster (20 points)
  + Verification: The student must a) run the command for the instructor, and demonstrate that a cluster has been created, and b) show the config files matching the create.
  + Because of time constraints, the cluster does not need to be the one on which the following steps are run
* Create a Jenkins Groovy pipeline to deploy an app with two microservices: (Not adding any points for this)
  + Verification: The student must show the groovy config files, and also run them successfully
  + The student must show the state of the deployment in the kubernetes cluster prior to running the pipeline
  + Create a Docker image for a service on a commit (10 points)
    - Verification: A correctly named (including version number) docker image should have created
  + Push image to Docker Hub (10 points)
    - Verification: The student must show the new image in docker hub
  + Run automated tests (10 points)
    - Verification: The console output must show that automated tests have been run, and the image is only built if the tests pass
  + Run code quality tests using SonarQube (10 points)
    - Verification: The console output must show that quality tests have been run, and the image is only built if the tests pass
  + Deploy to Kubernetes (20 points)
    - Verification: The student must show that the new image is running successfully in the Kubernetes cluster