Code Challenge Task #1

We would like you to demonstrate the automation of the spin-up and installation of a single-machine n-tier architecture. It is up to your interpretation which layers you would like to introduce, provided they can all be automatically started from a single command and serve some basic data.

Requirements:
High-level: Using automation we want to spin up an environment which will allow us to connect to a web server on port 80 or 8080 and serve a bit of simple java or python applications that will say " Hello World", i.e. running curl to your public endpoint will result in "Hello World"
You will be required to write CaC (Configuration as Code) / IaC (Infrastructure as Code) with tooling for an easy deployment of the application into AWS/GCP.

Criteria:
·   Developed within a git repository with frequent commits, you may use public GitHub
·   Use IaaC (terraform, terraform/ansible) to automate the spin up/down single machine environment
·   OS installation/configuration (Linux OS , any flavours and any versions) and configure:
         * make sure all packages are update to date and all pending security updates are applied against the default OS repositories.
          * disable IPv6 system wide.
·   Configuration management (Chef/Puppet/Ansible) to install and configure applications

Provide documentation with:
 * Clear instructions for the reviewer to deploy your scripts/code.
 * Requirements for running. (Tooling pre-installed? AWS/GCP account?)
 * Explanation of design choices, short comings and assumptions

Please establish a git repository from the beginning and demonstrate frequent commits.
We should only have to then connect to the instances IP address with a browser to see the resulting data returned.
Finally, we recommend you spend a maximum of 5 hours on this activity, however you may spend longer if you wish.

Submission:
Options for submission are:
  * Link to private git repository : please share with https://github.com/colinchaigcis (Github now supports private repos for free)
  *Invite github user colingchaigcis to your private repository
NB! Please do not allow public access to your git repository!