Please prepare an archive that implements the steps below: The solution should contain
- A Vagrantfile
- All associated configuration management files
- A README.md that lists both the steps we should run to duplicate your solution and any assumed software version(s).

Build the following infrastructure in vagrant using configuration management (Ansible, Chef or similar):
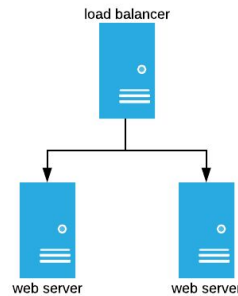
The brief:
- All VMs built using the following vagrant box:
  https://app.vagrantup.com/ubuntu/boxes/bionic64
- All VMs allow the vagrant user, and users in the admin group, to sudo without a password
- Webservers and load balancer running nginx
- Simple 'Hello World' application deployed to both webservers
- Automated tests to show that app is deployed correctly and nginx is load balancing correctly
- Solution is idempotent

You may use vagrant's built in provisioner to install the config manager of your choice.

We're interested in your working as much as your answers, so where you make a decision to go one way rather than another, *please explain your thinking*. Your solution will be assessed on code quality and comprehensibility, as well as the quality of your documentation, not just on technical correctness.

Optional extra credit:
- Include a section for possible improvements and compromises made during the development of your solution
- Have the webapp be dynamic - e.g. perform a db query for inclusion in the response (such as picking a random quote from a database) or calling an API of your choice(e.g. weather).
- => Any additional resources (e.g. a shared db server) should be set up by the Vagrant file, and configured using config management

Some points to note:
- We will assess you based on the quality of the solution, documentation and how easily someone else can pick it up

- It's fine for your implementation to deviate from the task as documented (we love innovative ideas!) - but please give full details of what you have changed and why - We're interested in your working as much as your answers, so where you make a decision to go one way rather than another, please explain your thinking.
- Please give a rough indication of the number of hours spent completing this task

Finally, you are almost there! Once you have completed this technical test in your own time and returned it to us, we will aim to assess it within 48 hours.