##Labs

\* ### Lab 1

#### Title - Google Cloud Fundamentals: Getting Started with Cloud Marketplace

#### Objectives

\* To launch a cloud solution using Cloud Marketplace

#### Task 1 - Use Market Place to deploy a LAMP stack

##### Steps (Code)

\* `gcloud deployment-manager deployments create my-dep --config lampstack.jinja`

- The configuration for the

lampstack is defined in the lampstack,jinja file which is used by the deployment manager.

#### Task 2 - Verify your deployment

##### Steps (Code)

\* Change the current working directory to opt/bitnami `cd /opt/bitnami`

\* Copy the phpinfo.php file to a publicly accessible directory under the web server document root `sudo sh -c 'echo "<?php phpinfo(); ?>" > apache2/htdocs/phpinfo.php'`

\* Visit the url to view the page `http://[SITE\_ADDRESS]/phpinfo.php`

#### Screenshots

![Lab 1](screenshots/lab1.png)

\* ### Lab 2

#### Title - Google Cloud Fundamentals: Getting Started with Compute Engine

#### Objectives

\* Create a Compute Engine virtual machine using the Google Cloud Platform (GCP) Console

\* Create a Compute Engine virtual machine using the gcloud command-line interface

\* Connect between the two instances

#### Task 1 - Create a virtual machine using the GCP Console

##### Steps (Code)

\* Create a VM instance `gcloud compute instances create my-vm-1 --zone=us-central1-a --machine-type=n1-standard-1 --subnet=default --network-tier=PREMIUM --maintenance-policy=MIGRATE --service-account=36480928317-compute@developer.gserviceaccount.com --scopes=https://www.googleapis.com/auth/devstorage.read\_only,https://www.googleapis.com/auth/logging.write,https://www.googleapis.com/auth/monitoring.write,https://www.googleapis.com/auth/servicecontrol,https://www.googleapis.com/auth/service.management.readonly,https://www.googleapis.com/auth/trace.append --tags=http-server --image=debian-9-stretch-v20200910 --image-project=debian-cloud --boot-disk-size=10GB --boot-disk-type=pd-standard --boot-disk-device-name=my-vm-1 --reservation-affinity=any`

#### Task 2 - Create a virtual machine using the gcloud command line

##### Steps (Code)

\* `gcloud compute instances create "my-vm-2" --machine-type "n1-standard-1" --image-project "debian-cloud" --image "debian-9-stretch-v20190213"--subnet "default"`

#### Task 3 - Connect between VM instances

##### Steps (Code)

\* Connect to my-vm-2 via SSH and ping my-vm-1 `ping my-vm-1`

\* Connect to my-vm-1 instance - `ssh my-vm-1`

\* Install Nginx server `sudo apt-get install nginx-light -y`

\* Confirm the web server is running `curl http://localhost/`