

HSBC Cloud Hands on Assessment

Problem Statement

Provisioning and managing a secure, scalable and load balanced environment is a key requirement in GCP workload deployments.

Compute Requirements: 25 marks

Create a project named [Cloud_ B<no>_HSBC2019_ <NAME>-Proj1] and grant editor role granted for the user, Also, additionally grant project Billing Manager Role, Compute Admin Role, IAM admin Role and get started with the below activities [5]

1. Create an instance [Cloud_ B<no>_HSBC2019_ <NAME>-inst1] of Debian Linux instance with apache installed. – [3]

```
sudo su -  
  
apt-get update  
  
apt-get install apache2 -y  
  
service apache2 start  
  
service apache2 status
```

2. Create a custom image of this instance with the name [Cloud_ B<no>_HSBC2019_ <NAME>-img1] [1]
3. Now, Create an instance template with the name [Cloud_ B<no>_HSBC2019_ <NAME>-template1] [1]
4. Make use of this instance to create 2 instance groups in two different regions [Cloud_ B<no>_HSBC2019_ <NAME>-mig_region [10]
5. Connect this instance group to a Load balancer named [Cloud_ B<no>_HSBC2019_ <NAME>-lb with
 - a. Minimum instance of Auto scaling of 1 instance and maximum number of instance is 3 [3]
 - b. CPU utilization as 70% [2]
 - c. Health check with cool down period of 300 seconds. [5]
 - d. Capture the snapshots of all the above steps and copy it in a word document and save it as [Cloud_ B<no>_HSBC2019_ <NAME>]

Network Requirements: 25 marks

1. Create a custom network [Cloud_ B<no>_HSBC2019_ <NAME>-nw with one subnet. [10]
2. Create an instance to test the load balancer. [5]
3. SSH into the instance and execute following command

```
sudo su -
```

```
apt-get install apache2-utils -y
```

```
ab -n 100000 -c 1000 http://<IP address of loadbalancer>/
```

4. Navigate to Monitoring tab in load balancing section and capture the screenshot,
5. Capture the snapshots of the above steps and copy it in a word document and save it as [Cloud_ B<no>_HSBC2019_ <NAME>] [5]

Note: Instructions to upload the completed solution will be communicated to the participants during the hands-on Assessment.