Assignment 8 – Load Balancers

DS 561 – Cloud Computing

Vishwas Bhaktavatsala
U74206902
vishwasb@bu.edu
GitHub Url: https://github.com/vishwas21/DS561-vishwas-assignments

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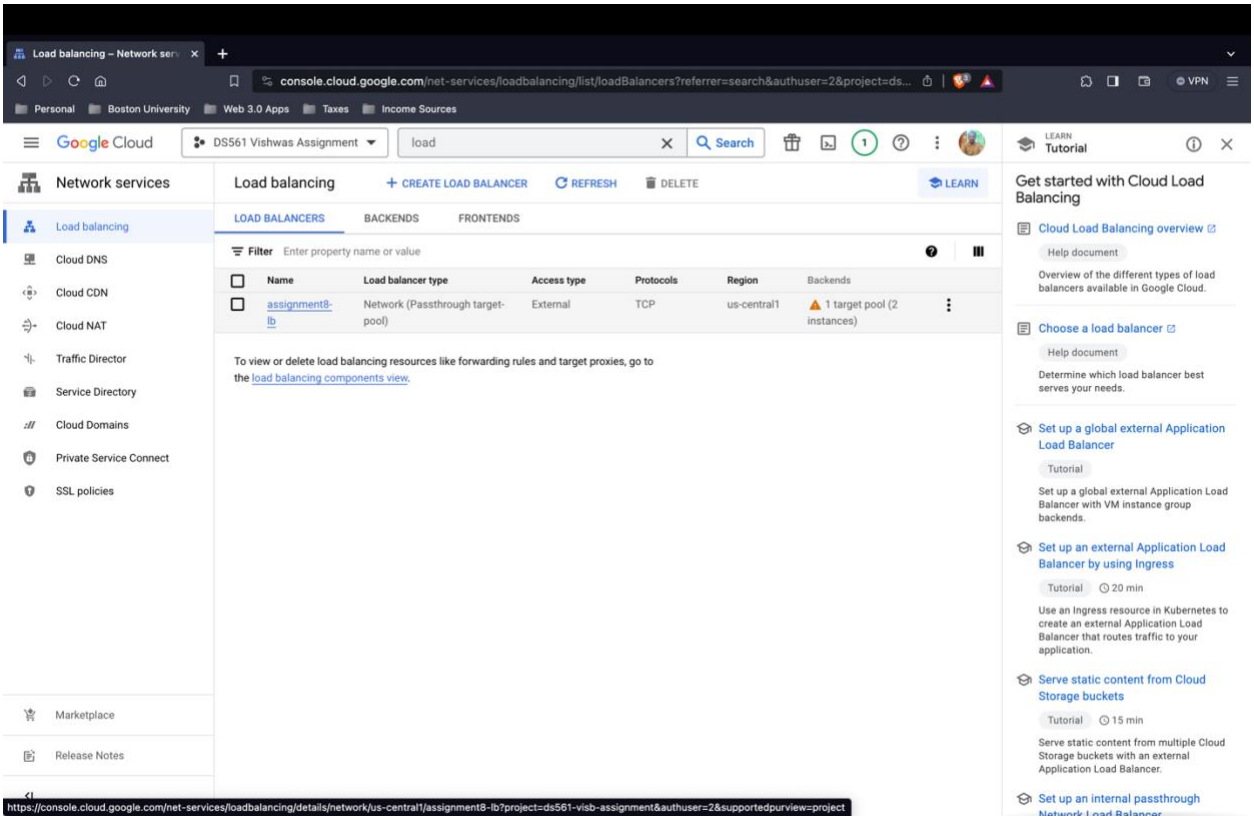
Command used to run the http_client.py:
(Can be run by installing all the dependencies in the requirements.txt)

```
python3 http_client.py -d 34.30.67.192 -p 8085 -b none -i 10000 -n 20 -v -w none
```

Load Balancer:

IP: 34.30.67.192

Port: 8085



assignment8-lb

Target-pool Network Load Balancer

Frontend

Protocol	IP version	IP:Port	Network Tier
TCP	IPv4	34.30.67.192:8085	Premium

Backend

Name	Region	Health check
assignment8-lb	us-central1	hc-http-8085

ADVANCED CONFIGURATIONS

Instance	Zone
assignment4-http-startup-vm-1	us-central1-b
assignment4-http-startup-vm-2	us-central1-a

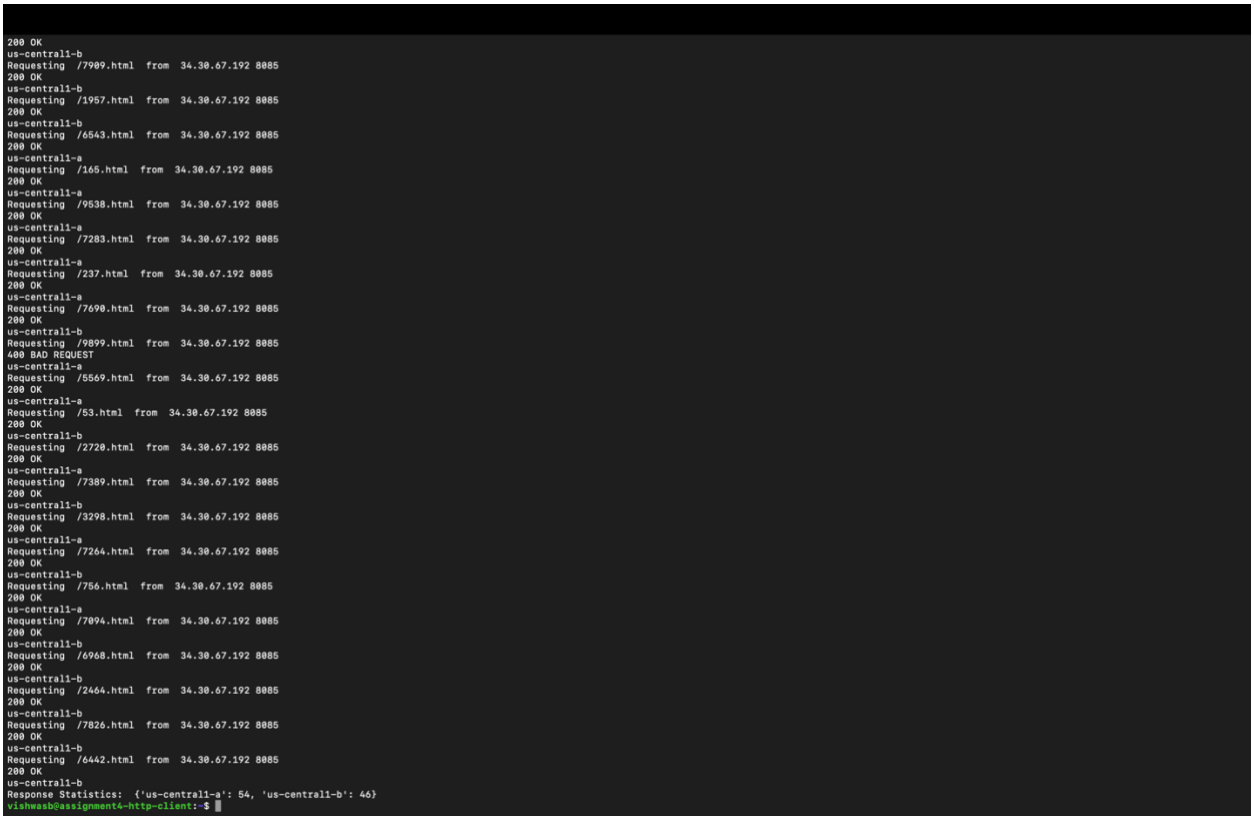
VM Instance:

VM instances

Filter Enter property name or value

Status	Name	Zone	Recommendations	In use by	Internal IP	External IP	Connect
✓	assignment4-http-client	us-central1-a	Save $6 / mo		10.128.0.6 (nic0)	34.41.239.203 (nic0)	SSH
✓	assignment4-http-startup-vm-1	us-central1-b		assignme...	10.128.0.13 (nic0)	35.193.11.248 (nic0)	SSH
✓	assignment4-http-startup-vm-2	us-central1-a		assignme...	10.128.0.14 (nic0)	34.27.2.159 (nic0)	SSH

Client Run for 100 requests:



Inference:

1. Load balancer was able to figure out that one of the VMs have stopped working and rerouted the traffic within a matter of 1 to 2 seconds.
2. Load balancer was a little slow in figuring out that the VM is back up and running, can be attributed to the VM startup time and the startup script execution time. This time it took around 15 sec.
3. The Ratio of requests served by each VM is almost the same. When tested with a small number of requests, it was around 50% and when tested with a higher number like 100 requests according to the screen shot 54 requests were handled by one VM while the rest 46 were handled by the other.