Task Details

1) Here created a VPC using Terraform that have following

a. Two public subnets in different zones
b. Two private subnets in different zones(In this task we don't need)
c. Route table for public subnets
d. Route table for private subnet
e. Internet gateway
f. NAT gateway
g. Elastic IP for NAT gateway
h. One Security Group

All recipes are in **infrastructure** directory.
We created only two instances in public subnets and changed their hostname defined in task as well.
To run these recipes we need to setup aws cli and terraform first.

Commands for provision Infrastructure, first go to **infrastructure** directory then run the following commands:

```
$ terraform init
$ terraform plan
$ terraform apply
```

2) Created a chef cookbook(**msrcosmos1.tar.gz**) for installation all packages in task-2 on both provisioned servers.

Command for bootstrap MSR-test-Instance-1 & MSR-test-Instance-2 servers:

$ knife bootstrap Public_IP --ssh-user ubuntu --sudo --identity-file ~/key/msrcosmos.pem --node-name node_name --run-list 'recipe[msrcosmos1]'

3) Created a chef cookbook(**msrcosmos2.tar.gz**) for Create a Docker Container on MSR-test-Instance-1 using Docker Compose file and ensure apache webserver is installed.

Command for bootstrap MSR-test-Instance-1server :

$ knife bootstrap Public_IP --ssh-user ubuntu --sudo --identity-file ~/key/msrcosmos.pem --node-name node_name --run-list 'recipe[msrcosmos2]'

4) Created a chef cookbook(**msrcosmos3.tar.gz**) for create a Docker Container on MSR-test-Instance-2 using Docker Compose file and ensure couchdb is installed with web GUI.

To access couchdb using web.

http://IP/:5984/_utils/

user: msrcosmos
Password: msrcosmos