1. VPC
2. Create one VPC Gateway VPC
   1. Gateway VPC – CIDR - 122.2.0.0/16
3. Two Private and Two Public subnets in Gateway VPC and associate subnets with respective route tables. All the subnets to be in different availability zones.
4. Add NAT Gateway to the Gateway VPC (in Public Subnet), associate eip with NAT Gateway. Add Route in Private route table, so that resources in Private subnet can access internet via NAT Gateway.
5. Add Internet Gateway to Gateway VPC and add route in public subnet.
6. ECS
7. Create a ECS (Fargate) Cluster, and task definition with 2 Containers and the configuration should be 1vCPU and 2GB RAM.
8. Docker hub Uri is: rajmohanb/travel-app:amd64
9. These 2 containers should be deployed in private subnet, each container should be deployed different AZs.
10. Create Load balancer and these contains in target group. Deploy ALB in public subnet exposing 80 ports to internet (Create a separate Security group for ALB)
11. Create a Security group with following inbound rules  
     Protocol HTTP, Source (ALB Security Group)  
     Protocol MySQL, Source 0.0.0.0/0
12. ASG
13. Create an ASG for the above Containers  
    Desired – 2  
    Min – 1  
    Maximum – 4

D. Bastion Host  
  
Deploy a Bastion Host (ubuntu 22.04) with public IP Address

* 1. Install Docker and MySQL client in in Bastion Host. All the containers should be accessible from Bastion Host.
  2. Install required tools like AWS CLI 2 for accessing fargate cluster and containers

1. TERRAFORM  
   1. Create the entire infrastructure in terraform using modules.  
   2. Code should be Production grade

Statefile should be in s3 bucket  
terraform plan should be saved in file