Junior Site Reliability Engineer

Feel free to use anyone/mix of the following scripting language

- Terraform
- Cloudformation
- Python
- Bash/shell scripting

Task 1

- Create a VPC with 4 subnets (AWS)
    - 3 Public subsets (can create instances with public IP's and accessible from internet)
    - 3 Private subnets (without public IP's) .
- Create an autoscaling group with desired 3, minimum 2 maximum 5 instances
    - An ec2 instance with nginx installed and serves traffic
    - Create an ELB/ALB that serves traffic to/from previously created nginx server on HTTPS port

Bonus

- Run nginx server as docker container on the ec2 instance.

Task 2

- Create a script that can update desired, minimum and maximum number of instances in the autoscaling group created in the previous task.
- Script should have the ability to make sure that instances are "InService" after scaling out .

- Script should have the ability to check if instance count is back to the default number (desired 3, minimum 2, maximum 5) when the scale in process completes.
- Make sure to catch and throw possible exceptions.

Bonus:

- Create an ec2 instance (expand the terraform script written in the previous task) and schedule the python script as a cron job that runs every day at 1:00 AM .)