## **DevOps Assignment**

**Note:** Try to implement as much functionalities as possible and provide proper description wherever applicable

- 1. Cloud formation script to create below AWS components
  - VPC with two public and private subnets
  - Route tables for each subnet
  - Security Group to allow port 80 and 443
  - ELB and ALB
  - Private route53 hosted zone and CNAME entry for both ALB and ELB
  - IAM Policy for assignment-3
- 2. Ansible playbook to do following task
  - Pick a Linux AMI
  - Install webserver (Apache/Nginx)
  - Download code from git
  - Configure webserver with security best practices (List them)
  - Create a self-signed certificate
  - Secure a demo site using self-signed certificate
- 3. Execute Ansible playbook
  - Run Ansible playbook in a packer job and create AMI
  - Automatically create ASG using AMI created in above step and attach it to ELB.
  - Showcase capability of ALB, by created two different domain route policy.
  - Instance launched behind ELB/ALB should have role attached having access to s3 specific bucket, pull images from S3.
- 4. Create a script using any preferred programming language (python, Node.js, java etc.) to perform following activities
  - List AWS services being used region wise
  - List each service in detail, like EC2, RDS etc.