Objective: Deploy Web Application on the Amazon EC2 Windows instances with Elastic Load Balancer in front of web application servers & database. Use two Availability Zones for provision of two web application servers in separate private subnets and configure them for high availability.

Note: Make use of Name Tags on each resource for identification

Region: North Virginia

1. This deployment should include VPC with 2 Public & 3 Private subnets (**Web server and RDS should be on Private subnet**), Internet | NAT Gateway along with 1 CIDR block.

2. Create 1 EC2 Instance in public, Install IIS, my SQL workbench/client & create Launch Configuration. **Delete this machine once you create a Launch Configuration**

3. All Web Server will be provisioned by using **AutoScaling** Group on Private Subnet with Minimum, Maximum & desired capacity of 2 VMs.

4. Create an Internet facing **Elastic load balancer** along with **ELB Security Group** and add both EC2 Instances in the **Target Group** so that an internet user should be able to open http web server page (**Port 80**).

5. Create a separate **Security Group (SG)** for **ELB and ASG** to allow web traffic from **ELB** only.

6. Web servers should be accessible via **Bastion host** only.

7. Create **MySQL RDS** which should be accessible via web servers using a client.

8. connect RDS with MYSQL client under Autoscaling VMs

9. You should receive notifications via Email/SMS from AutoScaling Group.

10. Configure Route 53 with Load Balancer Endpoint so that your Website should be accessible **via yourname.sherdilitacademy.net**

Hint: ELB, EC2, VPC, RDS, AutoScaling, SNS & Route53

Deployment time: 2.5 Hours