Assignment3: Deploying AWS EC2 Instance and RDS Instance using CloudFormation

Task Requirements:

1. **Deploy Networking Infrastructure:**
    - Create VPC, Subnet, Public Route table and Association.
2. **Deploy EC2 Instance:**
    - Launch a new EC2 instance using a CloudFormation YAML template.
    - AMI ID and Instance Type should come from input variables.
    - Associate the instance with a Security Group that allows inbound SSH traffic on port 22.
3. **Deploy RDS Instance**:
    - Launch a new RDS database instance.
    - Create a database named "assignment3".
    - Associate the RDS instance with a Security Group allowing inbound MySQL traffic (port 3306).
    - Make the database publicly accessible.
4. **Required Files**:
    - YAML Files containing CloudFormation templates for EC2 Instance, Networking, and RDS Instance.
5. **Provider Configuration**:
    - AWS authentication must be properly configured (AWS Access Key, Secret Key, and Authentication Token).
    - AWS Region should be set to us-east-1.
6. **Template and State Management**:
    - Store the CloudFormation templates locally.

Submission Details:

- Submission Items: One document containing below items

1. Screenshot(s) showing:
   a. VPC, Subnets, and Internet Gateway created on AWS Console.
   b. EC2 Instance launched and its Public IP displayed.
   c. RDS Instance launched successfully.
   d. CloudFormation Stack Events and Outputs.
2. CloudFormation YAML Templates for Networking, EC2, and RDS.
3. Output terminal screenshot if stack created via AWS CLI.

Assessment Criteria (Total: 30 points)

- Weightage in Final grade: 10%
- Screenshots – 20 points
- YAML Template file – 5 points
- Formatting and Presentation – 5 points