**AWS Assignment 3**

1. Explain the concept of auto-scaling.

Ans: AWS Auto Scaling monitors our applications and automatically adjusts capacity to maintain steady, predictable performance at the lowest possible cost. Using AWS Auto Scaling, it’s easy to setup application scaling for multiple resources across multiple services in minutes. The service provides a simple, powerful user interface that lets us build scaling plans for resources including Amazon EC2 instances and Spot Fleets, Amazon ECS tasks, Amazon DynamoDB tables and indexes, and Amazon Aurora Replicas. AWS Auto Scaling makes scaling simple with recommendations that allow us to optimize performance, costs, or balance between them. If we are already using Amazon EC2 Auto Scaling to dynamically scale your Amazon EC2 instances, we can now combine it with AWS Auto Scaling to scale additional resources for other AWS services. With AWS Auto Scaling, your applications always have the right resources at the right time.

1. Explain Cloud Formation Solution.

Ans: AWS CloudFormation is a service that helps us to model and set up our AWS resources so that we can spend less time managing those resources and more time focusing on our applications that run in AWS.

1. Mention and explain AWS services that are not specialized to a specific location.

Ans: AWS offers a broad set of global cloud-based products including compute, storage, database, analytics, networking, machine learning and AI, mobile, developer tools, IoT, security, enterprise applications

IAM is a services which is not specific for a particular location.

1. What's the difference between pausing and terminating an Amazon Elastic Compute Cloud instance?

Ans: Pausing: Means we are temporarily bringing the services to hold and can be restarted any time when required. Services charges will be charged.

Terminating: When we are completely deleting the instance and we can not use it later. Billing will not encure.

1. Describe how to set up CloudWatch to recover an EC2 instance.

Ans:

* Open the Amazon EC2 console.
* In the navigation pane, choose Instances.
* Select the instance that you want to configure.
* Choose Actions, and then choose Monitor and troubleshoot. Then, choose Manage CloudWatch alarms.
* Choose Create an alarm.

Note: To create an alarm, you must have AWS Identity and Access Management (IAM) permissions to stop and start the associated instance. For more information, see Creating IAM roles.

* For Alarm notification, choose an existing Amazon Simple Notification Service (Amazon SNS) topic. To create a new topic, see Creating an Amazon SNS topic.

Note: To receive notifications when an alarm is triggered, you must be subscribed to the SNS topic.

* Toggle on Alarm action, and then choose Recover.
* For Group samples by and Type of data to sample, choose an appropriate statistic and metric for your use case.
* For Consecutive period and Period, specify the evaluation period for the alarm.
* (Optional) Modify the automatically created Alarm name.
* Choose Create.