AWS Solutions Architect Associate - Reviewer 1

Designing a Cost-Optimized Architectures 1

Question 1: A company hosted a web application in an Auto Scaling group of EC2 instances. The IT manager is concerned about the over-provisioning of the resources that can cause higher operating costs. A Solutions Architect has been instructed to create a cost-effective solution without affecting the performance of the application. Which dynamic scaling policy should be used to satisfy this requirement?

a. Use suspend and resume scaling.
b. Use scheduled scaling.
c. Use simple scaling.
d. Use target tracking scaling.

Question 2: An application is hosted in an AWS Fargate cluster that runs a batch job whenever an object is loaded on an Amazon S3 bucket. The minimum number of ECS Tasks is initially set to 1 to save on costs, and it will only increase the task count based on the new objects uploaded on the S3 bucket. Once processing is done, the bucket becomes empty and the ECS Task count should be back to 1.

Which is the most suitable option to implement with the LEAST amount of effort?

a. Set up an alarm in CloudWatch to monitor CloudTrail since this S3 object-level operations are recorded on CloudTrail. Set two alarm actions to update ECS task count to scale-out/scale-in depending on the S3 event.
b. Set up a CloudWatch Event rule to detect S3 object PUT operations and set the target to a Lambda function that will run Amazon ECS API command to increase the number of tasks on ECS. Create another rule to detect S3 DELETE operations and run the Lambda function to reduce the number of ECS tasks.
c. Set up an alarm in CloudWatch to monitor CloudTrail since the S3 object-level operations are recorded on CloudTrail. Create two Lambda functions for increasing/decreasing the ECS task count. Set these as respective targets for the CloudWatch Alarm depending on the S3 event.
d. Set up a CloudWatch Event rule to detect S3 object PUT operations and set the target to the ECS cluster with the increased number of tasks. Create another rule to detect S3 DELETE operations and set the target to the ECS Cluster with 1 as the Task count.