**TO COMPLETE THIS TASK HERE ARE THE FOLLOWING STEPS:**

**SAMPLE OUTPUT1: Configuration of AWS CloudWatch Alarms**

* **STEP1: Sign in to AWS Console:**

Sign in to your AWS Management Console.

* **STEP2: Select CloudWatch:**

From the AWS Management Console, select "Services" and then choose "CloudWatch”.

under the Management & Governance section.

Create Alarms for Resources:

**a. For EC2 Instances:**

Click on "Alarms" in the CloudWatch console.

Click "Create Alarm."

Select the "EC2" namespace.

Choose the metric you want to monitor (e.g., CPU utilization, Memory Utilization).

Set the conditions for the alarm (e.g., threshold values).

Configure actions to be taken when the alarm state is triggered. This is where you can set up

notifications.

**b. For RDS Databases:**

Follow a similar process, but select the "RDS" namespace and choose relevant metrics such

as CPU Utilization, Database Connections, etc.

**c. For Lambda Functions:**

Again, follow a similar process but select the "AWS/Lambda" namespace and choose metrics

like Invocations, Errors, Duration, etc.

* **STEP3: Configure Actions for Alarms:**

After defining alarm conditions, specify actions to be taken when an alarm state is triggered.

Choose "Create a new topic" in the SNS section and configure it to send notifications to email

addresses or Slack channels.

**Sample Output 2: Integration of AWS SNS for Alerts**

* **STEP4: Create SNS Topics:**

In the AWS Console, navigate to the Simple Notification Service (SNS) and create topics for

different types of alerts (e.g., one for EC2, one for RDS, one for Lambda).

* **STEP5: Subscribe to Topics:**

Subscribe to the SNS topics using email addresses or Slack channels. You can use the

AWS Management Console to add subscribers to these topics.

* **STEP6: Configure Alarm Actions:**

In the CloudWatch alarm configuration (as mentioned in Sample Output 1), when setting up

actions for alarm state changes, choose the SNS topic you created to receive notifications.

Configure SNS to send alerts to email addresses or Slack channels.

**Sample Output 3: Creation of Custom CloudWatch Dashboards**

* **STEP7: Create a Custom Dashboard:**

In the CloudWatch Console, navigate to "Dashboards" and click "Create Dashboard." Provide

a name for your dashboard.

* **STEP8: Add Widgets:**

Add widgets to the dashboard to display relevant metrics and alarms. For each widget, select

the resource type (EC2, RDS, Lambda) and specify the metric you want to display.

* **STEP9: Customize and Organize:**

Customise the layout, size, and appearance of your widgets. Organise them to provide an at-

a-glance view of your resources' performance and status.

* **STEP10: Save and Share:**

Save your custom dashboard for future use. You can also share it with other team members

for collaborative troubleshooting and analysis.

By following these steps, you will have implemented monitoring for your AWS resources, set up alerts using CloudWatch alarms, and integrated AWS SNS to send notifications to email addresses or Slack channels. The custom CloudWatch dashboard will help you visualize your resource performance and status for troubleshooting and analysis.