Objective: Assess the understanding of basic AWS concepts and the practical skills gained during the workshop.

Key Points need to be considered

- Please complete all sections of the assignment on your own. Use of AI tools to write answers is not permitted, although you may refer to resources available on the Internet.
- For the hands-on session, ensure that you take screenshots and provide a description with proper steps for each action taken.
- To pass the assignment and receive a certificate from us, you must score above *70 marks*.
- Submit your answers to the theory questions in a document format (e.g., Word or PDF).
- Please send the PDF via email with the Title line "AWS-SESSION-ASSIGNMENT - With Your Full Name" to the following address:
  To: admin@uki.life
  CC: vithushan@uki.life, vavuniya@uki.life
- The deadline for submission is 7 days from now, so please ensure your assignment is submitted before 12:00 AM on December 27th 2024.
- Resources

  Slides References - AWS Resources

Section 1: Theory Questions *(40 Marks)*

1. Define cloud computing and explain its advantages over traditional on-premises IT infrastructure.
2. What are AWS Regions and Availability Zones? Why are they important?
3. Match the following AWS services to their primary use case:
   EC2:
   S3:
   RDS:
   Lambda:
4. Explain the Shared Responsibility Model in AWS. Who is responsible for securing data in AWS?

Section 2: Hands-on Questions *(60 Marks)*

Launch a Virtual Machine on AWS *(20 Marks)*

- Create an EC2 instance using the free-tier eligible Amazon Linux 2 AMI.
- Connect to the instance using SSH.

Create an S3 Bucket *(10 Marks)*

- Create an S3 bucket and upload a sample file.
- Make the file publicly accessible and share the link.

Create a new IAM user with programmatic access. *(10 Marks)*

- Assign it the "S3 Read-Only Access" policy.
- Demonstrate that the user can list bucket contents but cannot upload files.

S3 Event-Driven Lambda *(20 Marks)*

- Create an S3 bucket.
- Set up an S3 event trigger to invoke a Lambda function when a file is uploaded to the bucket.
- Write a Lambda function that logs the name and size of the uploaded file.
- Test the workflow by uploading a file to the S3 bucket and viewing the CloudWatch logs.