Practical 3

Introduction to cloud security Lab (CCP306)

AIM: Configure AWS Identity and Access Management (IAM) Service.

Getting set up with IAM

AWS Identity and Access Management (IAM) helps you securely control access to Amazon Web Services (AWS) and your account resources. IAM can also keep your sign-in credentials private. You don't specifically sign up to use IAM. There is no charge to use IAM.

Use IAM to give identities, such as users and roles, access to resources in your account. For example, you can use IAM with existing users in your corporate directory that you manage external to AWS or you can create users in AWS using AWS IAM Identity Center. Federated identities assume defined IAM roles to access the resources they need.

Task 1:-

Step 1: Sign up for an AWS account

Step 2: Create your first IAM user

https://docs.aws.amazon.com/IAM/latest/UserGuide/getting-started.html

Step 3: Create your first role

Step 4: To create a role for an IAM user

Step 5: To create your first IAM policy

Task 2: -

- Grant access to the billing console https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_billing.html
- Delegate access across AWS accounts using roles
 https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_cross-account-with-roles.html
- Create a customer managed policy

 $\underline{https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_managed-policies.html}$

- Use attribute-based access control (ABAC)
 https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_attribute-based-access-control.html
- Permit users to manage their credentials and MFA settings
 https://docs.aws.amazon.com/IAM/latest/UserGuide/tutorial_users-self-manage-mfa-and-creds.html