CLOUD PRACTICALS

Time limit: 1 hr 30min
Marks : 20

Do the following 3 practical questions

Instructions:

1.Please mention question numbers clearly for each answer.
2.The answers for all 3 questions must be **put in one single document**. The **title of the document must be "Cloud Practicals_[Your name]"** and attach the screenshots for each activity and push it to git mallikarjuna.hs@tibilsolutions.com as a collaborator

1.

Questions:

1.Launch a free-tier **Ubuntu 22.04** EC2 instance and connect to it using SSH **using CLI (Not using Console)** [5 marks]
2.Create a S3 bucket **using CLI** [5 marks]
3.Transfer a file from your local machine to the EC2 instance using SCP4. Set up AWS CLI and upload the same file to the S3 bucket **using CLI commands**. [10 marks]

ions:

1.Launch a free-tier **Ubuntu 22.04** EC2 instance and connect to it using SSH **using CLI (Not using Console)** [5 marks]

ANSWER:

STEP1: add aws configure in CLI .

COMMAND:aws configure

STEP2:provide aws acess key

Provide aws security key

STEP3:create a key pair to use with EC2

COMMAND:aws ec2 create-key-pair --key-name my-key --query 'KeyMaterial' --output text > my-key.pem

chmod 400 my-key.pem

STEP4:find the lastest ubuntu 22.04 AMI ID

COMMAND:aws ec2 describe-images \

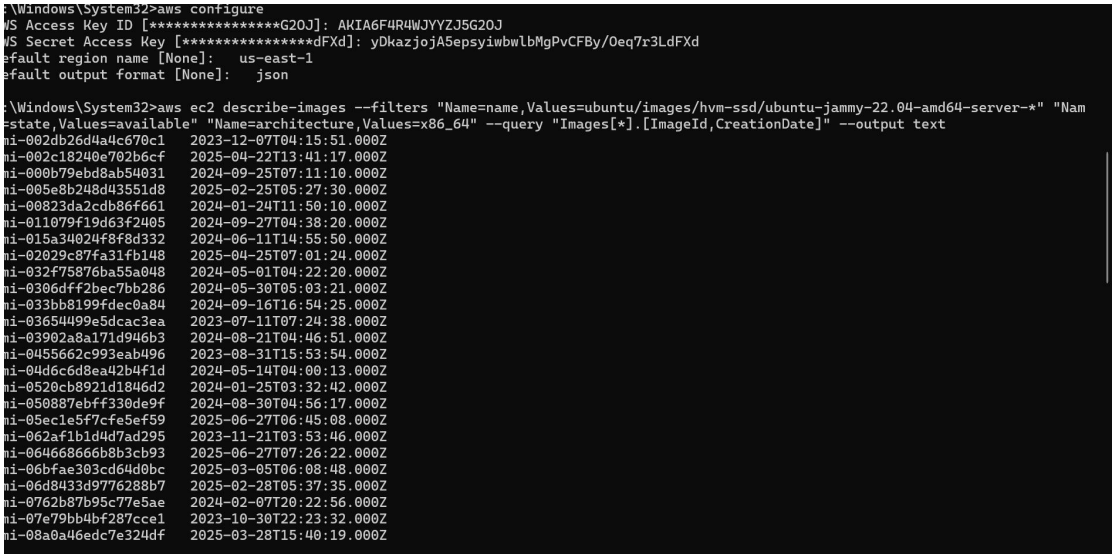
--filters "Name=name,Values=ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-*" \

"Name=state,Values=available" \

"Name=architecture,Values=x86_64" \ Launch the EC2 Instance

--query "Images[*].[ImageId,CreationDate]" \

--output text | sort -k2 -r | head -n1



COPY IMAGE ID

STEP4: Launch the EC2 Instance

aws ec2 run-instances \

--image-id ami-xxxxxxxxxxxx \

--instance-type t2.micro \

--key-name my-key \

--security-groups default \

--tag-specifications 'ResourceType=instance,Tags=[{Key=Name,Value=MyUbuntuInstance}]'

STEP 5: Get the public ip of your Ec2 instances.

aws ec2 describe-instances \

--query "Reservations[*].Instances[*].PublicIpAddress" \

--output text

Step6: SSH into the instance

Command :ssh -i my-key.pem ubuntu@<EC2-PUBLIC-IP>

2.Create a S3 bucket using CLI

ANSWER:

Command for creating S3 Bucket.

aws s3api create-bucket --bucket my-unique-palakolanudeepika \

--region us-east-1 \

--create-bucket-configuration LocationConstraint=us-east-1

```
C:\Windows\System32>aws s3api create-bucket --bucket qwertyuiasdfgh77 --region us-east-1
{
    "Location": "/qwertyuiasdfgh77"
}

C:\Windows\System32>
```

Access key

If you lose or forget your secret access key, you cannot retrieve it. Instead, create a new access key and make the old key inactive.

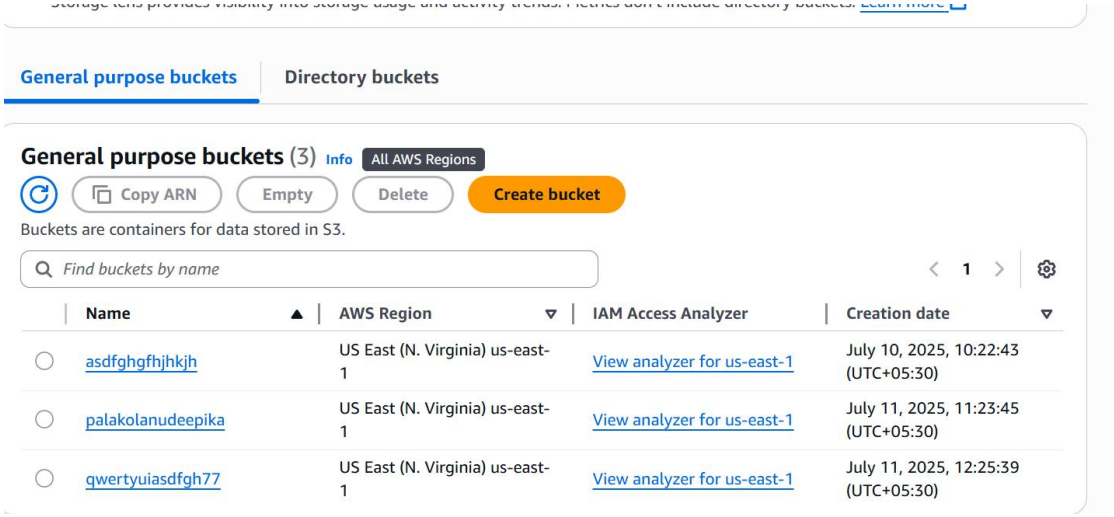
Access key	Secret access key
AKIA6F4R4WJY3UF2ERNQ	********** Show

Access key best practices

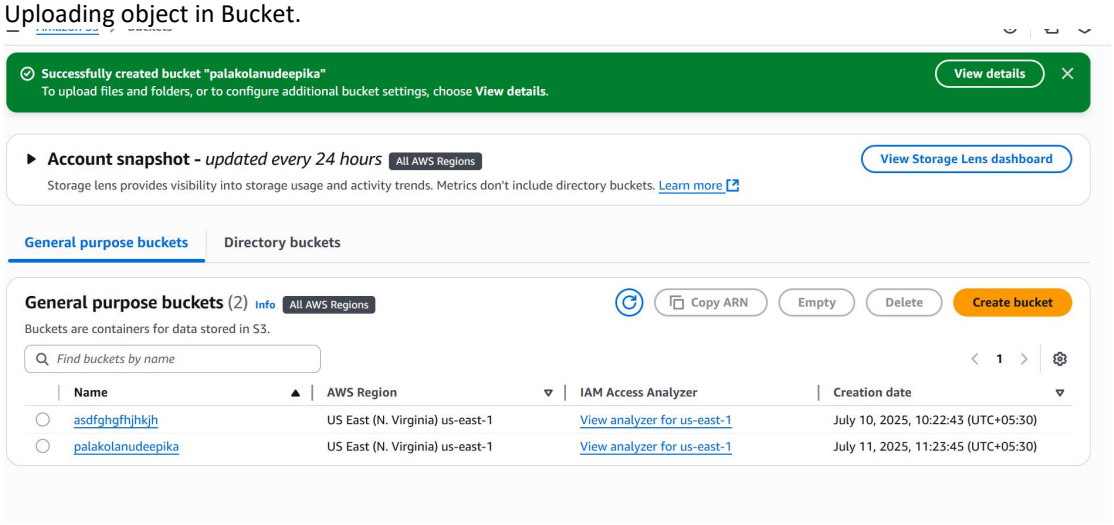
- Never store your access key in plain text, in a code repository, or in code.
- Disable or delete access key when no longer needed.
- Enable least-privilege permissions.
- Rotate access keys regularly.

For more details about managing access keys, see the best practices for managing AWS access keys.

Created bukect



Uploading object in Bucket.



2. Transfer a file from your local machine to the EC2 instance using SCP4. Set up AWS CLI and upload the same file to the S3 bucket **using CLI commands**. [10 marks]

ANSWER:
STEP 1: SSH INTO EC2
Command;ssh -i my-key.pem ubuntu@<EC2-PUBLIC-IP>
Step 2: install AWS CLI INTO EC2.
COMMAND:sudo apt update
sudo apt install awscli -y
STEP3: CONFIGURE AWS CLI

aws configure

STEP 4: UPLOAD file to s3
aws s3 cp localfile.txt s3://my-unique-bucket-name-123456/