

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 SCP. 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 access 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 latest 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

```
C:\Windows\System32>aws configure
AWS Access Key ID [*****]: AKIA6F4R4WJYVZJ5G20J
AWS Secret Access Key [*****]: yDkzjojA5epsyiwbwLbMgPvCFBy/Oeq7r3LdFXd
Default region name [None]: us-east-1
Default output format [None]: json

C:\Windows\System32>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" --query "Images[*].[ImageId,CreationDate]" --output text
ami-002db26d4a4c670c1 2023-12-07T04:15:51.000Z
ami-002c18240e702b6cf 2025-04-22T13:41:17.000Z
ami-000b79ebd8ab54031 2024-09-25T07:11:10.000Z
ami-005e8b248d43551d8 2025-02-25T05:27:30.000Z
ami-00823da2cdb86f661 2024-01-24T11:50:10.000Z
ami-011079f19d63f2405 2024-09-27T04:38:20.000Z
ami-015a34024f8f8d332 2024-06-11T14:55:50.000Z
ami-02029c87fa31fb148 2025-04-25T07:01:24.000Z
ami-032f75876ba55a048 2024-05-01T04:22:20.000Z
ami-0306dff2bec7bb286 2024-05-30T05:03:21.000Z
ami-033bb8199fdec0a84 2024-09-16T16:54:25.000Z
ami-03654499e5dcac3ea 2023-07-11T07:24:38.000Z
ami-03902a8a171d946b3 2024-08-21T04:46:51.000Z
ami-0455662c993eab496 2023-08-31T15:53:54.000Z
ami-04d6c6d8ea42b4f1d 2024-05-14T04:00:13.000Z
ami-0520cb8921d1846d2 2024-01-25T03:32:42.000Z
ami-050887ebff330de9f 2024-08-30T04:56:17.000Z
ami-05ec1e5f7cfe5ef59 2025-06-27T06:45:08.000Z
ami-062af1b1d4d7ad295 2023-11-21T03:53:46.000Z
ami-064668666b8b3cb93 2025-06-27T07:26:22.000Z
ami-06bfae303cd64d0bc 2025-03-05T06:08:48.000Z
ami-06d8433d9776288b7 2025-02-28T05:37:35.000Z
ami-0762b87b95c77e5ae 2024-02-07T20:22:56.000Z
ami-07e79bb4bf287cce1 2023-10-30T22:23:32.000Z
ami-08a0a46edc7e324df 2025-03-28T15:40:19.000Z
```

COPY IMAGE ID

STEP4: Launch the EC2 Instance

aws ec2 run-instances \

--image-id ami-xxxxxxxxxxx \

--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

Storage Lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. [Learn more](#)

General purpose buckets | Directory buckets

General purpose buckets (3) [Info](#) [All AWS Regions](#)

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Buckets are containers for data stored in S3.

	Name	AWS Region	IAM Access Analyzer	Creation date
<input type="radio"/>	asdfghghjkhkj	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 10, 2025, 10:22:43 (UTC+05:30)
<input type="radio"/>	palakolanudeepika	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 11, 2025, 11:23:45 (UTC+05:30)
<input type="radio"/>	qwertyuiasdfgh77	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 11, 2025, 12:25:39 (UTC+05:30)

Uploading object in Bucket.

[View details](#) [X](#)

Successfully created bucket "palakolanudeepika"
To upload files and folders, or to configure additional bucket settings, choose [View details](#).

Account snapshot - updated every 24 hours [All AWS Regions](#) [View Storage Lens dashboard](#)

Storage lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. [Learn more](#)

General purpose buckets | Directory buckets

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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/

