**CLOUD PRACTICALS**

**Name : Shivam koli**

**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

**Questions**:

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

   [ 5 marks]

Ans :

1. aws configure
2. aws access key : AWS Access Key ID [**********AL62]: AKIAV7DXTE37VTI7QLW3
3. aws secret key : AWS Secret Access Key [**********Qh/p]: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
4. Region : us-east-1

Step 2: Create a Key Pair

Command :

aws ec2 create-key-pair --key-name my-keypair --query "KeyMaterial" --output text > my-keypair.pem

I got:

'chmod' is not recognized...

Step 3: Get Latest Ubuntu 22.04

Command :

aws ec2 describe-images --owners 099720109477 --filters "Name=name,Values=ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-*" ...

ami-05ec1e5f7cfe5ef59

Step 4: created the security group and ssh

Command :

aws ec2 create-security-group ...
aws ec2 authorize-security-group-ingress ...

Step 5: launch ec2 instance

Command :

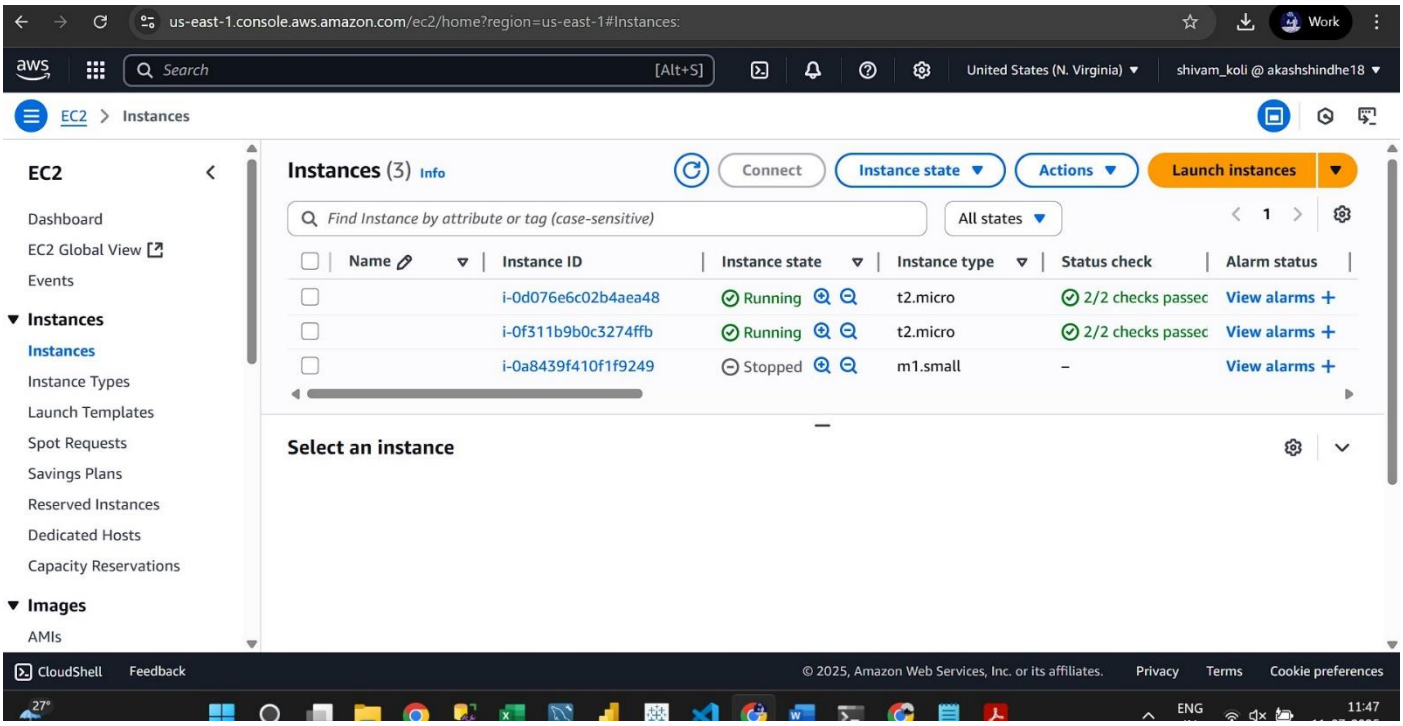
aws ec2 run-instances --image-id ami-05ec1e5f7cfe5ef59 --count 1 --instance-type t2.micro --key-name my-keypair --security-group-ids sg-0843096e924fd2713

Instance ID: i-0d076e6c02b4aea48
Public IP: 18.234.190.104

Step 6: check route table & internet gateway

Command :

aws ec2 describe-route-tables ...



```
Microsoft Windows [Version 10.0.22631.5624]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shivam>aws --version
aws-cli/2.27.21 Python/3.13.3 Windows/11 exe/AMD64

C:\Users\Shivam>aws configure
AWS Access Key ID [****************AL62]: AKIAV7DXTE37VTI7QLW3
AWS Secret Access Key [****************Qh/p]: 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
Default region name [None]: us-east-1
Default output format [None]:
```

```
C:\Users\Shivam>aws ec2 create-key-pair --key-name my-keypair --query "KeyMaterial" --output text > my-keypair.pem

C:\Users\Shivam>chmod 400 my-keypair.pem
'chmod' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Shivam>aws ec2 describe-images --owners 099720109477 --filters "Name=name,Values=ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-am
d64-server-*" "Name=state,Values=available" --query "Images[*].[ImageId,CreationDate]" --output text | sort
ami-02029c87fa31fb148   2025-04-25T07:01:24.000Z
ami-05ec1e5f7cfe5ef59   2025-06-27T06:45:08.000Z
ami-0a7d80731ae1b2435   2025-05-16T06:42:41.000Z
ami-0b529f3487c2c0e7f   2025-05-08T11:41:01.000Z
ami-0d016af584f4febe3   2025-06-17T06:49:54.000Z
```

```
C:\Users\Shivam>aws ec2 run-instances --image-id ami-05ec1e5f7cfe5ef59 --count 1 --instance-type t2.micro --key-name my-keypair --sec
urity-group-ids sg-0843096e924fd2713
{
    "ReservationId": "r-04f7b9f0f2ad5c9ca",
    "OwnerId": "410420193023",
    "Groups": [],
    "Instances": [
        {
            "Architecture": "x86_64",
            "BlockDeviceMappings": [],
            "ClientToken": "3e076e22-84a1-42dc-b9ea-030f4ea705b3",
            "EbsOptimized": false,
            "EnaSupport": true,
            "Hypervisor": "xen",
            "NetworkInterfaces": [
                {
                    "Attachment": {
                        "AttachTime": "2025-07-11T05:55:38+00:00",
                        "AttachmentId": "eni-attach-06111e7143d5ff548",
                        "DeleteOnTermination": true,
                        "DeviceIndex": 0,
                        "Status": "attaching",
                        "NetworkCardIndex": 0
                    },
                    "Description": "",
                    "Groups": [
                        {
                            "GroupId": "sg-0843096e924fd2713",
                            "GroupName": "ssh-access"
                        }
                    ],
                    "Ipv6Addresses": [],
```

2. Create a S3 bucket **using CLI** [5 marks]

Ans :

1. aws –version
2. aws configure

AWS Access Key ID : AKIAV7DXTE37VTI7QLW3

AWS Secret Access Key : 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

Default region name: us-east-1

3. Successfully Create a Unique Bucket

   aws s3api create-bucket --bucket hellohellobyebye --region us-east-1

4. Verify Bucket Creation

   aws s3 ls

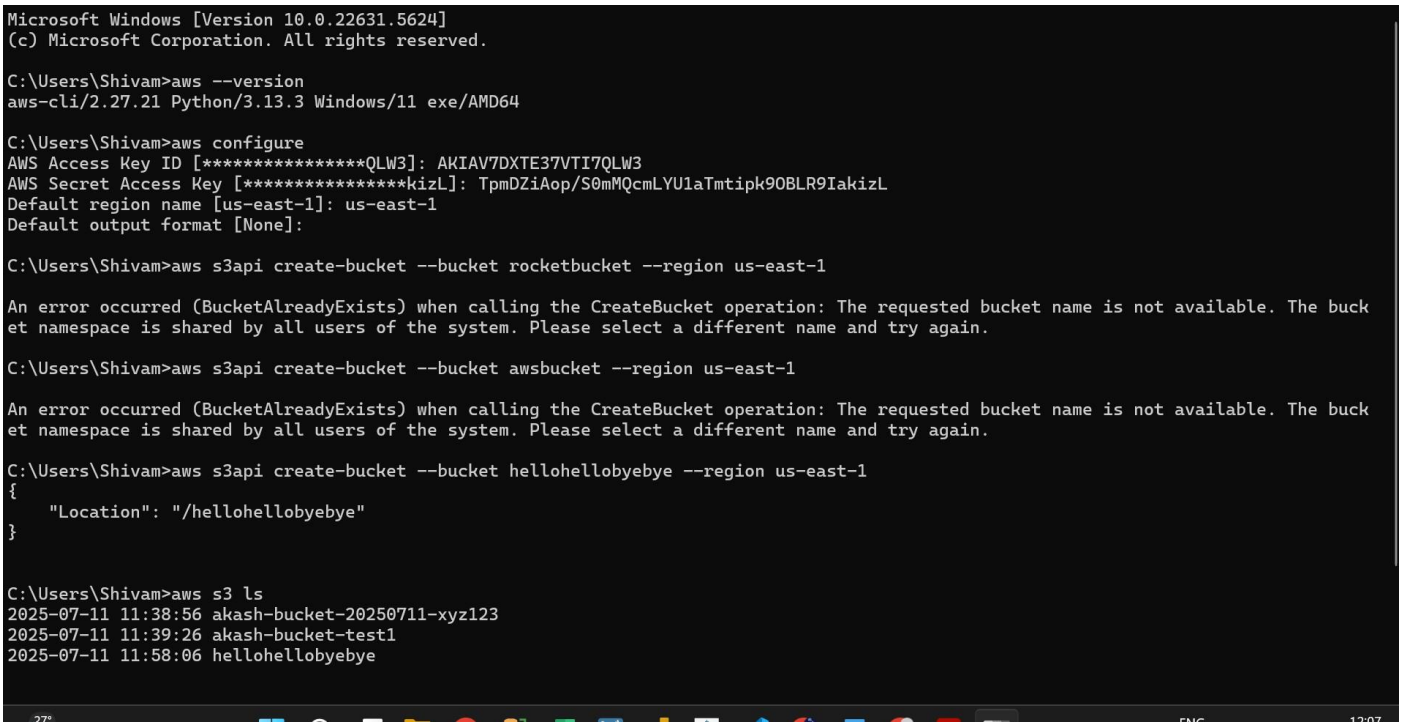
5. Upload a File to the S3 Bucket

   aws s3 cp "C:\Users\Shivam\Downloads\outcome.txt" s3://hellohellobyebye/

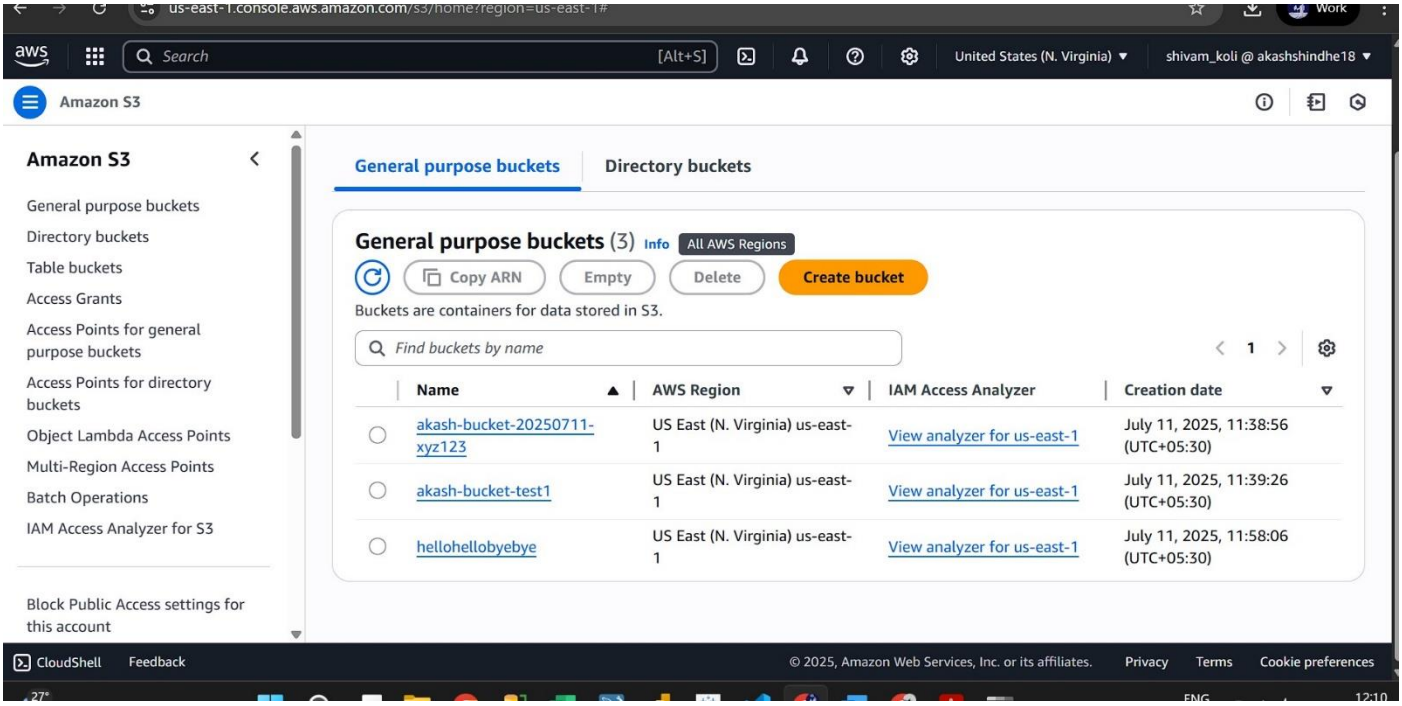
6. Verify File Upload

   aws s3 ls s3://hellohellobyebye/

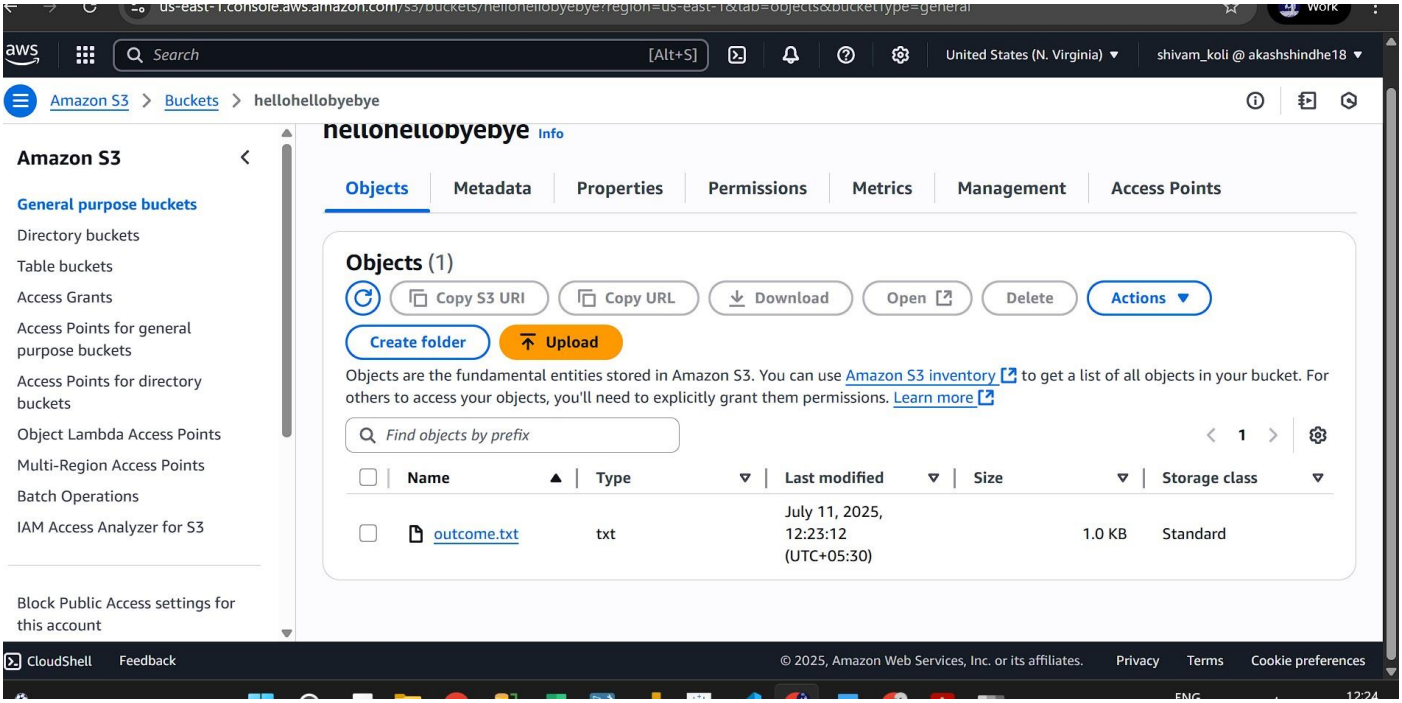
7. successfully created an S3 bucket using AWS CLI



```
C:\Users\Shivam>aws s3api create-bucket --bucket rocketbucket --region us-east-1

An error occurred (BucketAlreadyExists) when calling the CreateBucket operation: The requested bucket name is not available. The buck
et namespace is shared by all users of the system. Please select a different name and try again.

C:\Users\Shivam>aws s3api create-bucket --bucket awsbucket --region us-east-1

An error occurred (BucketAlreadyExists) when calling the CreateBucket operation: The requested bucket name is not available. The buck
et namespace is shared by all users of the system. Please select a different name and try again.

C:\Users\Shivam>aws s3api create-bucket --bucket hellohellobyebye --region us-east-1
{
    "Location": "/hellohellobyebye"
}


C:\Users\Shivam>aws s3 ls
2025-07-11 11:38:56 akash-bucket-20250711-xyz123
2025-07-11 11:39:26 akash-bucket-test1
2025-07-11 11:58:06 hellohellobyebye

C:\Users\Shivam>aws s3 cp ""C:\Users\Shivam\Downloads\outcome.txt"" s3://hellohellobyebye/
upload: Downloads\outcome.txt to s3://hellohellobyebye/outcome.txt

C:\Users\Shivam>aws s3 ls s3://hellohellobyebye/
2025-07-11 12:01:00       1033 outcome.txt

C:\Users\Shivam>
```




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]




Command :

1. Upload File from EC2 to S3

aws s3 cp /home/ubuntu/outcome.txt s3://hellohellobyebye/

verify it :

aws s3 ls s3://hellohellobyebye/

confirmation :

2025-07-11 12:23:12 1033 outcome.txt