

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

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: Creating EC2

Command used for creating : C:\Users\onesa>aws ec2 run-instances --image-id ami-020cba7c55df1f615 --count 1 --instance-type t2.micro --key-name test1 --security-group-ids sg-057d9baba7a6ea1fb --region us-east-1

Output of the command has been pasted

```
C:\Users\onesa>aws ec2 run-instances --image-id ami-020cba7c55df1f615 --count 1 --instance-type t2.micro --key-name test1 --security-group-ids sg-057d9baba7a6ea1fb --region us-east-1
{
  "ReservationId": "r-0fdbe09299732ba49",
  "OwnerId": "410420193023",
  "Groups": [],
  "Instances": [
    {
      "Architecture": "x86_64",
      "BlockDeviceMappings": [],
      "ClientToken": "f44e0588-dff1-4325-b078-0910acd078f",
      "EbsOptimized": false,
      "EnaSupport": true,
      "Hypervisor": "xen",
      "NetworkInterfaces": [
        {
          "Attachment": {
            "AttachTime": "2025-07-11T05:51:26+00:00",
            "AttachmentId": "eni-attach-087a7e15034de7b39",
            "DeleteOnTermination": true,
            "DeviceIndex": 0,
            "Status": "attaching",
            "NetworkCardIndex": 0
          },
          "Description": "",
          "Groups": [
            {
              "GroupId": "sg-057d9baba7a6ea1fb",
              "GroupName": "test1"
            }
          ]
        }
      ]
    }
  ]
}
```

Instance summary for i-0d076e6c02b4aea48Info

Updated less than a minute ago

Connect

Instance state▼

Actions▼

<div>Instance ID</div> <div>i-0d076e6c02b4aea48</div>	<div>Public IPv4 address</div> <div>18.234.190.104 open address</div>	<div>Private IPv4 addresses</div> <div>172.31.95.239</div>
<div>IPv6 address</div> <div>—</div>	<div>Instance state</div> <div>Running</div>	<div>Public DNS</div> <div>ec2-18-234-190-104.compute-1.amazonaws.com open address</div>
<div>Hostname type</div> <div>IP name: ip-172-31-95-239.ec2.internal</div>	<div>Private IP DNS name (IPv4 only)</div> <div>ip-172-31-95-239.ec2.internal</div>	
<div>Answer private resource DNS name</div> <div>—</div>	<div>Instance type</div> <div>t2.micro</div>	<div>Elastic IP addresses</div> <div>—</div>
<div>Auto-assigned IP address</div> <div>18.234.190.104 [Public IP]</div>	<div>VPC ID</div> <div>vpc-000877aab48e32090</div>	<div>AWS Compute Optimizer finding</div> <div>Opt-in to AWS Compute Optimizer for recommendation s. Learn more</div>
<div>IAM Role</div> <div>—</div>	<div>Subnet ID</div> <div>subnet-0716f792cc5a26e5c</div>	<div>Auto Scaling Group name</div> <div>—</div>
<div>IMDSv2</div> <div>Required</div>	<div>Instance ARN</div> <div>arn:aws:ec2:us-east-1:410420193023:instance/i-0d076e6c02b4aea48</div>	<div>Managed</div> <div>false</div>

DetailsStatus and alarmsMonitoringSecurityNetworkingStorageTags

▼ Instance detailsInfo

<div>AMI ID</div> <div>ami-020cba7c55df1f615</div>	<div>Monitoring</div> <div>disabled</div>	<div>Platform details</div> <div>Linux/UNIX</div>
<div>AMI name</div> <div>ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-20250610</div>	<div>Allowed image</div> <div>—</div>	<div>Termination protection</div> <div>Disabled</div>
<div>Stop protection</div> <div>Disabled</div>	<div>Launch time</div> <div>Fri Jul 11 2025 11:21:26 GMT+0530 (India Standard Time) (2 minutes)</div>	<div>AMI location</div> <div>amazon/ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-20250610</div>
<div>Instance reboot migration</div> <div>Default (On)</div>	<div>Instance auto-recovery</div> <div>Default</div>	<div>Lifecycle</div> <div>normal</div>
<div>Stop-hibernate behavior</div> <div>Disabled</div>	<div>AMI Launch index</div> <div>0</div>	<div>Key pair assigned at launch</div> <div>test1</div>
<div>State transition reason</div> <div>—</div>	<div>Credit specification</div> <div>standard</div>	<div>Kernel ID</div> <div>—</div>
<div>State transition message</div> <div>—</div>	<div>Usage operation</div> <div>RunInstances</div>	<div>RAM disk ID</div> <div>—</div>
<div>Owner</div> <div>410420193023</div>	<div>Enclaves Support</div> <div>—</div>	<div>Boot mode</div> <div>uefi-preferred</div>

```
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/pro

System information as of Fri Jul 11 07:03:38 UTC 2025

System load: 0.0          Processes: 105
Usage of /: 25.9% of 6.71GB Users logged in: 0
Memory usage: 20%        IPv4 address for enX0: 172.31.95.239
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Fri Jul 11 07:01:59 2025 from 18.206.107.29
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-95-239:~$

i-0d076e6c02b4aea48
PublicIPs: 18.234.190.104 PrivateIPs: 172.31.95.239

CloudShell Feedback
```

2. Create a S3 bucket using CLI

[5 marks]

Ans:

Command used: C:\Users\onesa>aws s3api create-bucket --bucket akash-bucket-test1
--region us-east-1

Output has been shared below

```
C:\Users\onesa>aws s3api create-bucket --bucket akash-bucket-test1 --region us-east-1
{
  "Location": "/akash-bucket-test1"
}

C:\Users\onesa>
```

akash-bucket-test1 Info

Objects | Metadata | Properties | Permissions | Metrics | Management | Access Points

Objects (1) Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	test1.pem	pem	July 11, 2025, 11:43:19 (UTC+05:30)	1.6 KB	Standard

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]

Ans:

Uploading file into s3 bucket

```
C:\Users\onesa>aws s3 cp "C:\Users\onesa\Downloads\test1.pem" s3://akash-bucket-test1/
upload: Downloads\test1.pem to s3://akash-bucket-test1/test1.pem

C:\Users\onesa>_
```

akash-bucket-test1 Info

Objects Metadata Properties Permissions Metrics Management Access Points

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