

Q1:

The screenshot shows the AWS Management Console interface. On the left is a navigation menu with options like 'EC2 Dashboard', 'Instances', 'Images', etc. The main content area is titled 'public-LB' under the 'Load balancers' section. It displays details for an Application Load Balancer, including its DNS name, IP address type (IPv4), status (Active), and availability zones. The console also shows tabs for 'Listeners', 'Network mapping', 'Security', 'Monitoring', 'Integrations', 'Attributes', and 'Tags'.

The screenshot shows a web browser window displaying the 'Apache2 Default Page' on an Ubuntu server. The page features the Ubuntu logo and a message stating 'It works!'. Below this, there is a 'Configuration Overview' section that explains the default configuration of the Apache2 server on Ubuntu, including references to the 'README.Debian.gz' file and the 'manual' for the 'apache2-doc' package. The browser's address bar shows the URL 'public-lb-1399106092.us-east-1.elb.amazonaws.com'.

Q2:

private ec2 in az b
jump host:

```

salmanyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/AWS/Credentials$ sudo scp -i new-keypair-LB.pem new-keypair-LB.pem ubuntu@3
5.172.141.221:/home/ubuntu
[sudo] password for salmanyoussef:
The authenticity of host '35.172.141.221 (35.172.141.221)' can't be established.
ED25519 key fingerprint is SHA256:b+ETRDmGeq/ZTcA8FgWu4NUQOLyQy6vpfAn4lv9C1CM.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '35.172.141.221' (ED25519) to the list of known hosts.
scp: /home/ubuntu/new-keypair-LB.pem: Permission denied
salmanyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/AWS/Credentials$ ssh -i new-keypair-LB.pem ubuntu@35.172.141.221
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

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

System information as of Tue Jan 31 00:07:21 UTC 2023

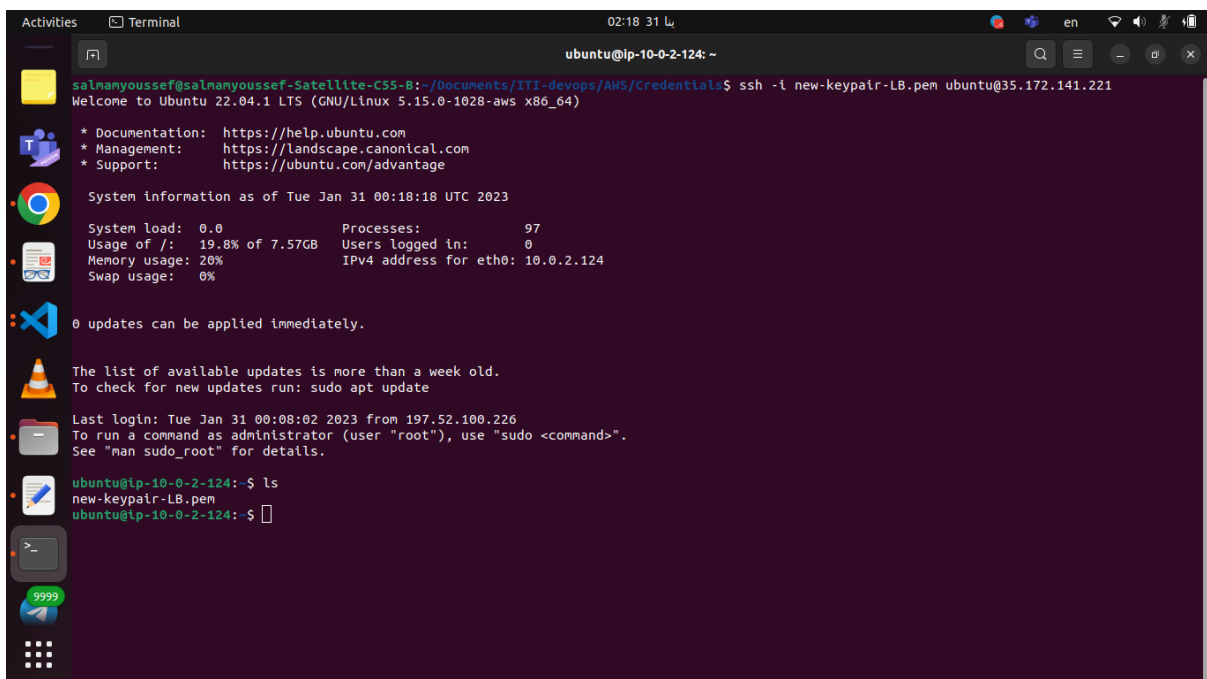
System load:  0.0               Processes:    95
Usage of /:   19.8% of 7.57GB   Users logged in: 0
Memory usage: 20%              IPv4 address for eth0: 10.0.2.124
Swap usage:   0%

0 updates can be applied immediately.

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

Last login: Mon Jan 30 23:52:51 2023 from 197.52.100.226
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

```



```

Activities  Terminal  02:18 31 L
ubuntu@ip-10-0-2-124: ~
salmanyoussef@salmanyoussef-Satellite-C55-B:~/Documents/ITI-devops/AWS/Credentials$ ssh -i new-keypair-LB.pem ubuntu@35.172.141.221
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

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

System information as of Tue Jan 31 00:18:18 UTC 2023

System load:  0.0               Processes:    97
Usage of /:   19.8% of 7.57GB   Users logged in: 0
Memory usage: 20%              IPv4 address for eth0: 10.0.2.124
Swap usage:   0%

0 updates can be applied immediately.

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

Last login: Tue Jan 31 00:08:02 2023 from 197.52.100.226
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-2-124: ~$ ls
new-keypair-LB.pem
ubuntu@ip-10-0-2-124: ~$

```

```
Activities Terminal 02:10 31 Lubuntu@ip-10-0-3-45: ~
ubuntu@ip-10-0-2-124:~$ ssh -i new-keypair-LB.pem ubuntu@10.0.3.45
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

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

System information as of Tue Jan 31 00:08:06 UTC 2023

System load:  0.0          Processes:      101
Usage of /:   26.1% of 7.57GB   Users logged in: 0
Memory usage: 28%          IPv4 address for eth0: 10.0.3.45
Swap usage:   0%

0 updates can be applied immediately.

Last login: Mon Jan 30 23:57:32 2023 from 10.0.2.124
ubuntu@ip-10-0-3-45:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2023-01-31 00:02:37 UTC; 8min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 6422 (apache2)
    Tasks: 55 (limit: 1143)
   Memory: 6.8M
     CPU: 69ms
   CGroup: /system.slice/apache2.service
           └─6422 /usr/sbin/apache2 -k start
             6424 /usr/sbin/apache2 -k start
             6425 /usr/sbin/apache2 -k start

Jan 31 00:02:37 ip-10-0-3-45 systemd[1]: Starting The Apache HTTP Server...
Jan 31 00:02:37 ip-10-0-3-45 apachectl[6421]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using
Jan 31 00:02:37 ip-10-0-3-45 systemd[1]: Started The Apache HTTP Server.
lines 1-16/16 (END)
```

for private ec2 in az a:

```
Activities Terminal 02:15 31 Lubuntu@ip-10-0-1-97: ~
ubuntu@ip-10-0-2-124:~$ ssh -i new-keypair-LB.pem ubuntu@10.0.1.97
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1028-aws x86_64)

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

System information as of Tue Jan 31 00:14:07 UTC 2023

System load:  0.0          Processes:      101
Usage of /:   22.2% of 7.57GB   Users logged in: 0
Memory usage: 25%          IPv4 address for eth0: 10.0.1.97
Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.

https://ubuntu.com/aws/pro

19 updates can be applied immediately.
16 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Last login: Tue Jan 31 00:14:08 2023 from 10.0.2.124
ubuntu@ip-10-0-1-97:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-01-30 23:56:06 UTC; 18min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2239 (apache2)
    Tasks: 55 (limit: 1143)
   Memory: 9.0M
     CPU: 162ms
   CGroup: /system.slice/apache2.service
           └─2239 /usr/sbin/apache2 -k start
             2241 /usr/sbin/apache2 -k start
             2242 /usr/sbin/apache2 -k start
```

Q3:

aws Services Search [Alt+s] N. Virginia stephane @ iam-user1-stephane

New EC2 Experience Tell us what you think

EC2 Dashboard
EC2 Global View
Events
Tags
Limits

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Instance Types
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Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
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Instances (1/9) Info

Find Instance by attribute or tag (case-sensitive)

Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elas
Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	-	-	-
Terminated	t2.micro	-	No alarms	us-east-1a	-	-	-
Terminated	t2.micro	-	No alarms	us-east-1a	-	-	-
Terminated	t2.micro	-	No alarms	us-east-1a	-	-	-
Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	-	-	-
Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	-	-	-

Instance: i-03ac56f70c59cf359 (private-ec2-b)

Details Security Networking Storage Status checks Monitoring Tags

▼ Instance summary Info

Instance ID i-03ac56f70c59cf359 (private-ec2-b)	Public IPv4 address -	Private IPv4 addresses 10.0.3.45
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type	Private IP DNS name (IPv4 only) ip-10-0-3-45.ec2.internal	
IP name: ip-10-0-3-45.ec2.internal		

Feedback Looking for language selection? Find it in the new Unified Settings

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New EC2 Experience Tell us what you think

EC2 Dashboard
EC2 Global View
Events
Tags
Limits

▼ Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations

▼ Images
AMIs
AMI Catalog

Instances (1/9) Info

Find Instance by attribute or tag (case-sensitive)

Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
i-03ac56f70c59cf359	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	-
i-0b9d78e04b69bc758	Terminated	t2.micro	-	No alarms	us-east-1a	-
i-0f290c15df03a2f52	Terminated	t2.micro	-	No alarms	us-east-1a	-
i-0aee44c17f11dac9a	Terminated	t2.micro	-	No alarms	us-east-1a	-
i-0ef4449a69d9dbc71	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	-
i-0cc708b7f545519b7	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	-

Instance: i-0ef4449a69d9dbc71 (private-ec2-b)

Details Security Networking Storage Status checks Monitoring Tags

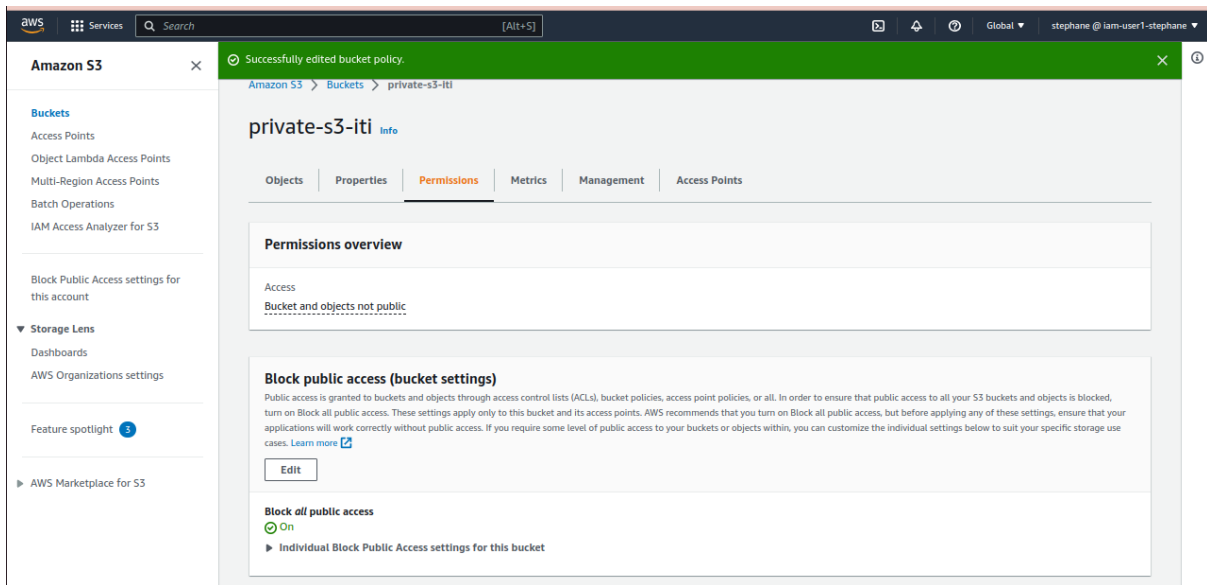
▼ Instance summary Info

Instance ID i-0ef4449a69d9dbc71 (private-ec2-b)	Public IPv4 address -	Private IPv4 addresses 10.0.1.97
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type	Private IP DNS name (IPv4 only) ip-10-0-1-97.ec2.internal	
IP name: ip-10-0-1-97.ec2.internal		

Feedback Looking for language selection? Find it in the new Unified Settings

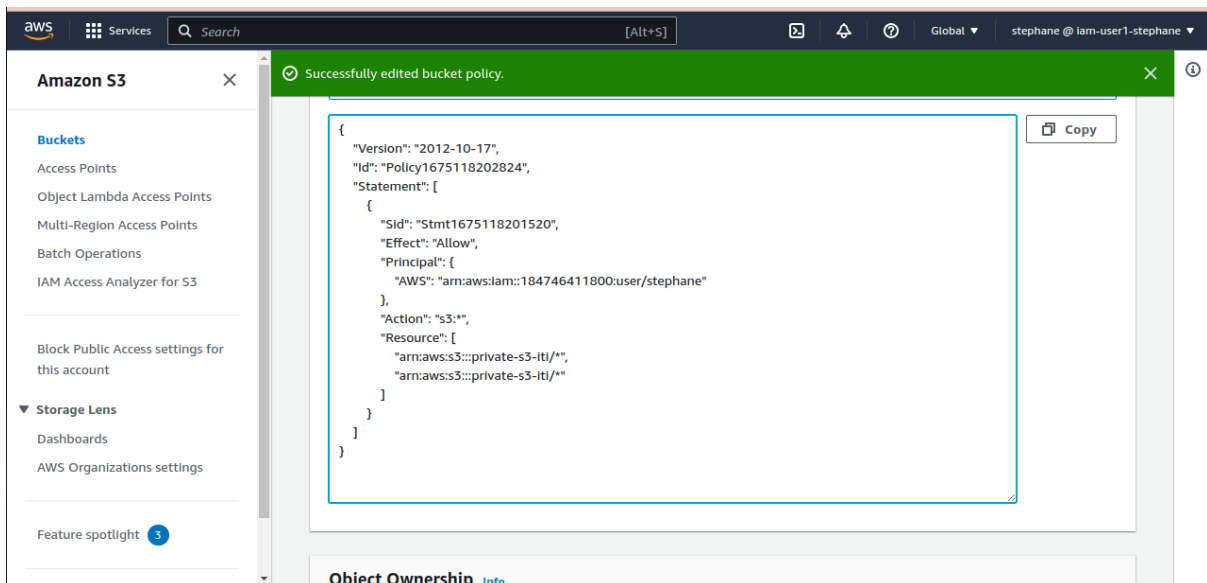
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Q4:



Q5:

```
ubuntu@ip-10-0-3-45:~$ aws configure list
Name          Value          Type          Location
-----
profile        <not set>       None          None
access_key     <not set>       None          None
secret_key     <not set>       None          None
region         <not set>       None          None
ubuntu@ip-10-0-3-45:~$ aws s3 ls s3://private-s3-iti
Unable to locate credentials. You can configure credentials by running "aws configure".
ubuntu@ip-10-0-3-45:~$
```



```
ubuntu@ip-10-0-3-45:~$ aws s3 ls
2023-01-30 20:11:21 private-s3-iti
ubuntu@ip-10-0-3-45:~$ aws s3 ls s3://private-s3-iti
2023-01-30 20:12:53      18 index.html
```

```
ubuntu@ip-10-0-3-45:~$ sudo aws s3 cp s3://private-s3-iti/index.html /var/www/html
download: s3://private-s3-iti/index.html to ../../var/www/html/index.html
ubuntu@ip-10-0-3-45:~$ cat /var/www/html
cat: /var/www/html: Is a directory
ubuntu@ip-10-0-3-45:~$ ls /var/www/html
index.html  index.nginx-debian.html
ubuntu@ip-10-0-3-45:~$
```