

# Assignment: 09

**Problem Statement:** Deploy a project from GitHub to EC2.

## Procedure:

**Step 1:** Log in to AWS and create an EC2 instance.

The screenshot shows the AWS Management Console interface. On the left is a navigation menu with options like EC2 Dashboard, EC2 Global View, Events, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity, Reservations, Images, AMIs, AMI Catalog, Elastic Block Store, Volumes, Snapshots, and Lifecycle Manager. The main area displays the 'Instance summary for i-0b808784da7b5b5d1 (myServer)'. It includes buttons for 'Connect', 'Instance state', and 'Actions'. The instance is in a 'Running' state. Key details include: Instance ID (i-0b808784da7b5b5d1), Public IPv4 address (3.109.4.114), Private IPv4 addresses (172.31.34.234), Instance state (Running), Hostname type (IP name: ip-172-31-34-234.ap-south-1.compute.internal), Private IP DNS name (ip-172-31-34-234.ap-south-1.compute.internal), Instance type (t2.micro), VPC ID (vpc-003907d798e946506), and Auto-assigned IP address (3.109.4.114 [Public IP]).

**Step 2:** Open terminal and connect with instance using ssh command.

```
→ ~ ssh -i ~/Downloads/sshKey.pem ubuntu@3.109.4.114
The authenticity of host '3.109.4.114 (3.109.4.114)' can't be established.
ECDSA key fingerprint is SHA256:UQZ2sXjgcxLGfyS6tl36B0cHlRgCtL+eEhraAnSf9CU.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '3.109.4.114' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1014-aws x86_64)
```

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

System information as of Wed Apr 24 05:04:29 UTC 2024

```
System load: 0.109375      Processes:            103
Usage of /: 20.4% of 7.57GB Users logged in:      0
Memory usage: 21%          IPv4 address for eth0: 172.31.34.234
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`

The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in `/usr/share/doc/*/copyright`.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.

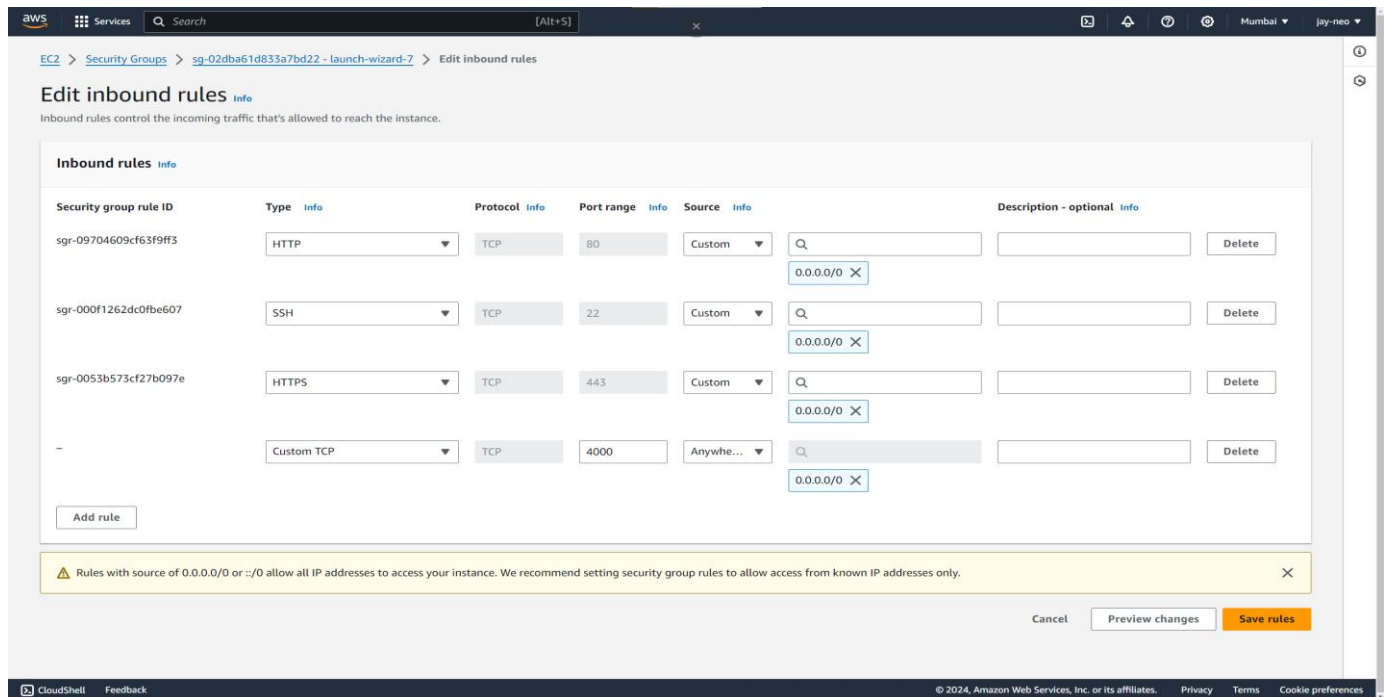
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo\_root" for details.

```
ubuntu@ip-172-31-34-234:~$ |
```

**Step 3:** Execute the following commands:

- `sudo apt-get update`
- `sudo apt-get upgrade`
- `sudo apt-get install nginx`
- `curl -SL https://deb.nodesource.com/setup_18.x | sudo -E bash`
- `sudo apt install nodejs`
- `git clone https://github.com/moumita02314/myawsproject1`

**Step 4:** The index.js file in GitHub consists of port no “4000”. Go to the Security option of the instance → Click the Security Group → go to Edit inbound rules → Click on Add rules → set Type as ‘Custom TCP’ with Port range of ‘4000’ Source as ‘Anywhere-IPv4’ and Save the rule.



**Step 5:** In terminal enter into myawsproject1 and execute the following commands:

- `cd myawsproject1`
- `npm install`
- `node index.js`

**Step 6:** Go to web browser in the public IPv4 with specifying port number.



Hello mckv