

Name → Siddharth Sutar

PRN no → 22010517

Roll no → 323054

Subject → CC

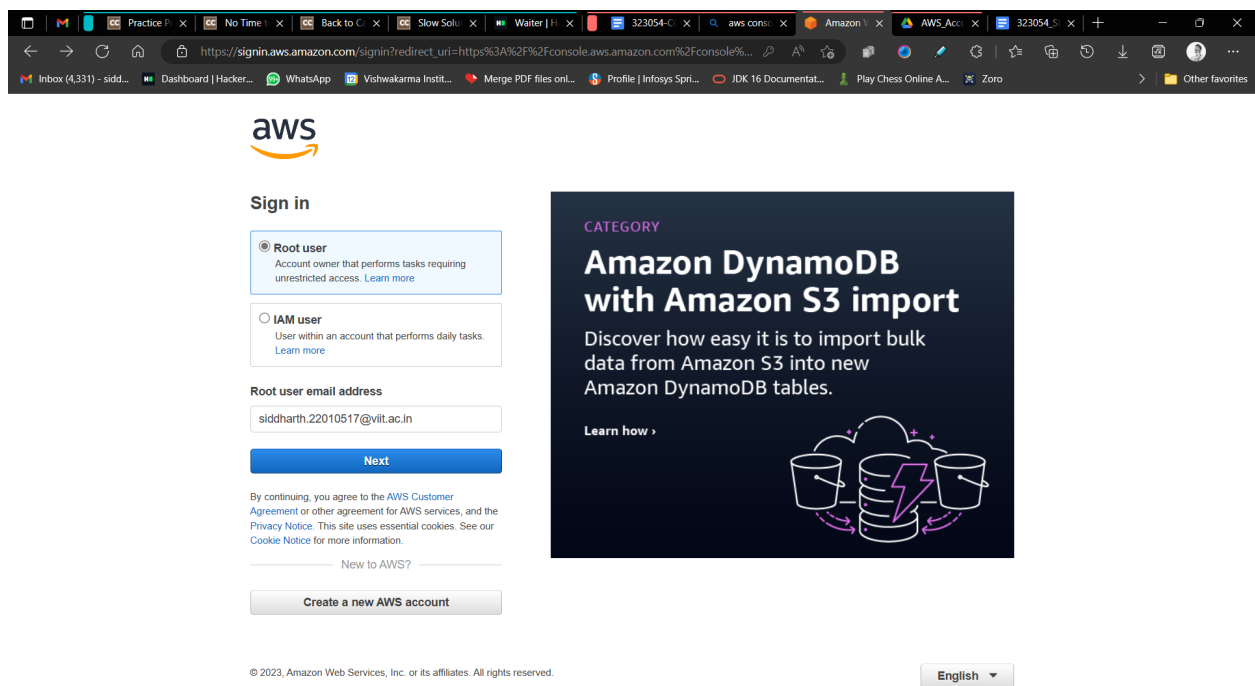
Batch → C3

Assignment No 3

Deploy Web application on AWS Cloud (or any cloud)(PHP/Python/Node js any application)

STEP 1

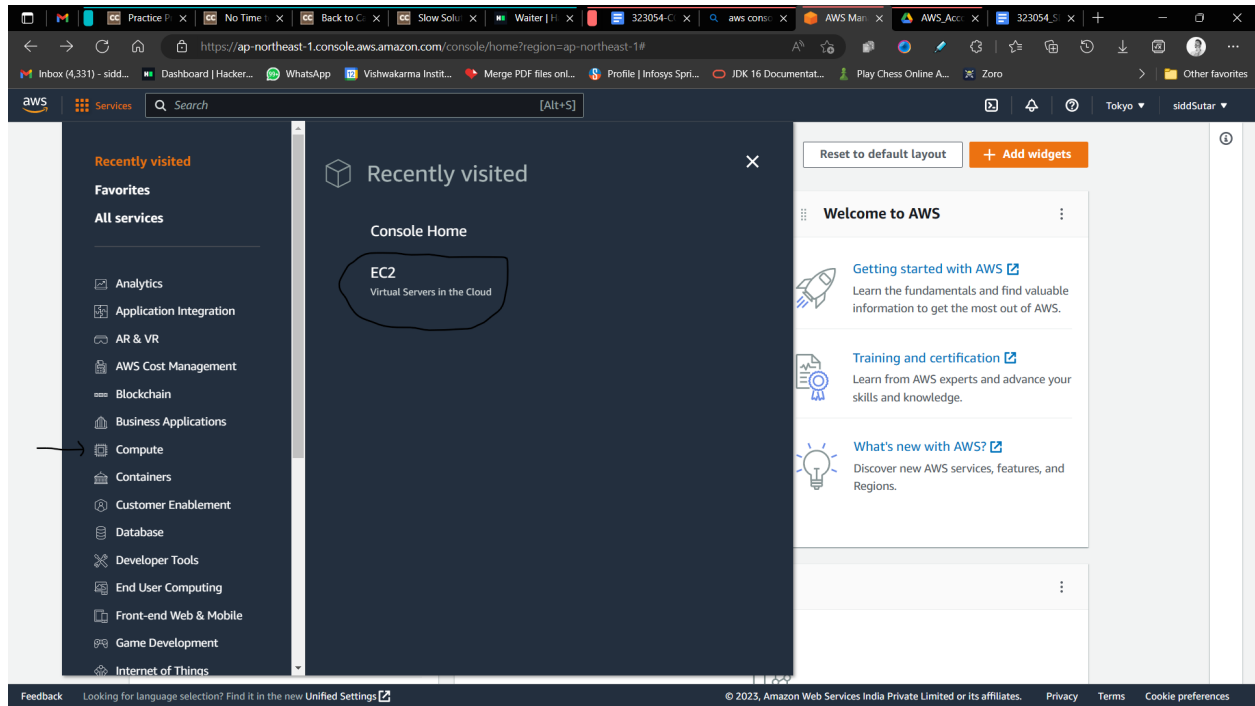
→ LOGIN TO AWS



The screenshot shows the AWS Sign-in page in a web browser. The browser's address bar displays the URL: `https://signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%2Fhome&source=aws_login`. The page features the AWS logo at the top left. Below it, the 'Sign in' section offers two options: 'Root user' (selected) and 'IAM user'. The 'Root user' option is described as 'Account owner that performs tasks requiring unrestricted access. Learn more'. The 'IAM user' option is described as 'User within an account that performs daily tasks. Learn more'. Below these options, there is a field for 'Root user email address' containing the email `siddharth.22010517@vilit.ac.in`. A blue 'Next' button is positioned below the email field. Underneath the 'Next' button, a disclaimer states: 'By continuing, you agree to the AWS Customer Agreement or other agreement for AWS services, and the Privacy Notice. This site uses essential cookies. See our Cookie Notice for more information.' Below the disclaimer, there is a link 'New to AWS?' and a button 'Create a new AWS account'. On the right side of the page, there is a promotional banner for 'Amazon DynamoDB with Amazon S3 import'. The banner includes the text 'CATEGORY', 'Amazon DynamoDB with Amazon S3 import', 'Discover how easy it is to import bulk data from Amazon S3 into new Amazon DynamoDB tables.', and a 'Learn how >' link. The banner also features a diagram showing data flow from S3 buckets to a DynamoDB table. At the bottom of the page, there is a copyright notice: '© 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved.' and a language selector set to 'English'.

STEP 2

→ Go to EC2 Instance via compute or access it directly from frequently used section



STEP 3

→ Configure the Instance

Name → Any name you like

OS → aws linux

Architecture → 64 bit

Create keys (Give any name to them and download it)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name
myServer [Add additional tags](#)

Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search your full catalog including 1000s of application and OS images

Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat S [Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-06ee4e2261a4dc5c3 (64-bit x86) / ami-06ee43a4ab099c264 (64-bit Arm)
Virtualization: hvm ENA enabled: true Root device type: ebs [Free tier eligible](#)

Description

Summary

Number of instances [Info](#)
1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-06ee4e2261a4dc5c3

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GiB of bandwidth to the internet.

[Cancel](#) [Launch instance](#)

Feedback Looking for language selection? Find it in the new Unified Settings [↗](#)

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Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2 Kernel 5.10 AMI 2.0.20230119.1 x86_64 HVM gp2

Architecture [AMI ID](#)
64-bit (x86) ami-06ee4e2261a4dc5c3 [Verified provider](#)

Instance type [Info](#)

Instance type

t2.micro [Free tier eligible](#)
Family: t2 1 vCPU 1 GiB Memory
On-Demand Windows pricing: 0.0198 USD per Hour
On-Demand SUSE pricing: 0.0152 USD per Hour
On-Demand RHEL pricing: 0.0752 USD per Hour
On-Demand Linux pricing: 0.0152 USD per Hour [Compare instance types](#)

Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*
serverKeys [Create new key pair](#)

Network settings [Info](#) [Edit](#)

Summary

Number of instances [Info](#)
1

Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-06ee4e2261a4dc5c3

Virtual server type (instance type)
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New security group

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[Cancel](#) [Launch instance](#)

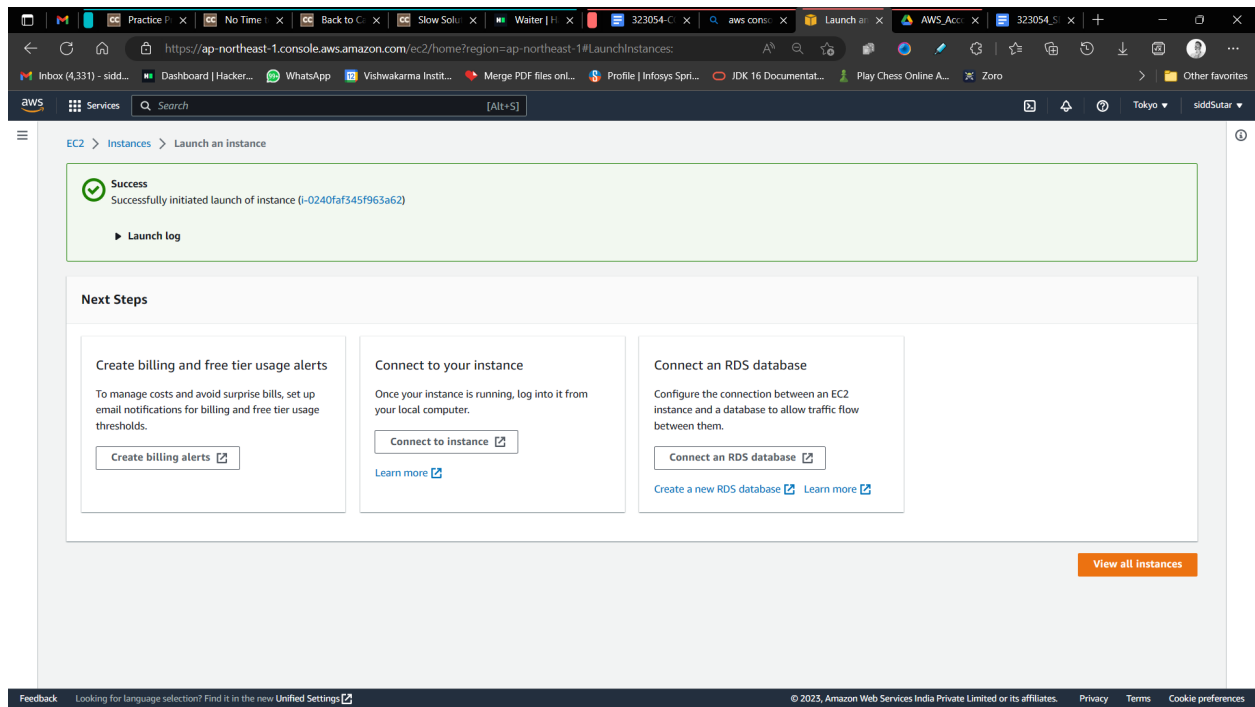
Feedback Looking for language selection? Find it in the new Unified Settings [↗](#)

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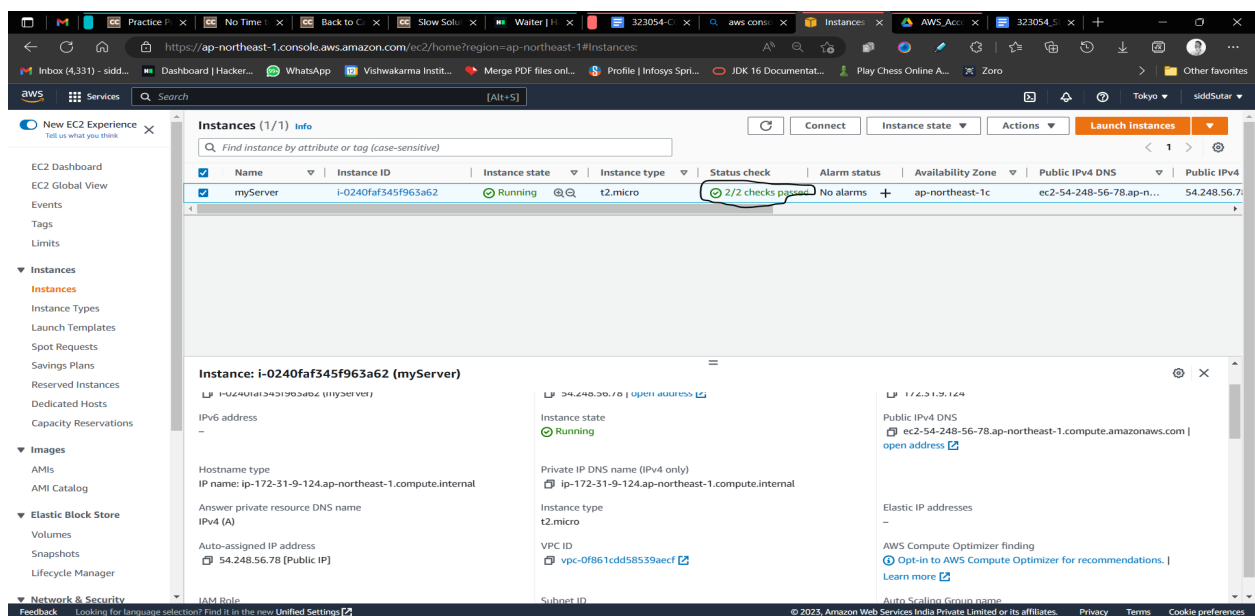
STEP 4

→ Launch the instance

→ After clicking at right bottom launch instance button it show look like this

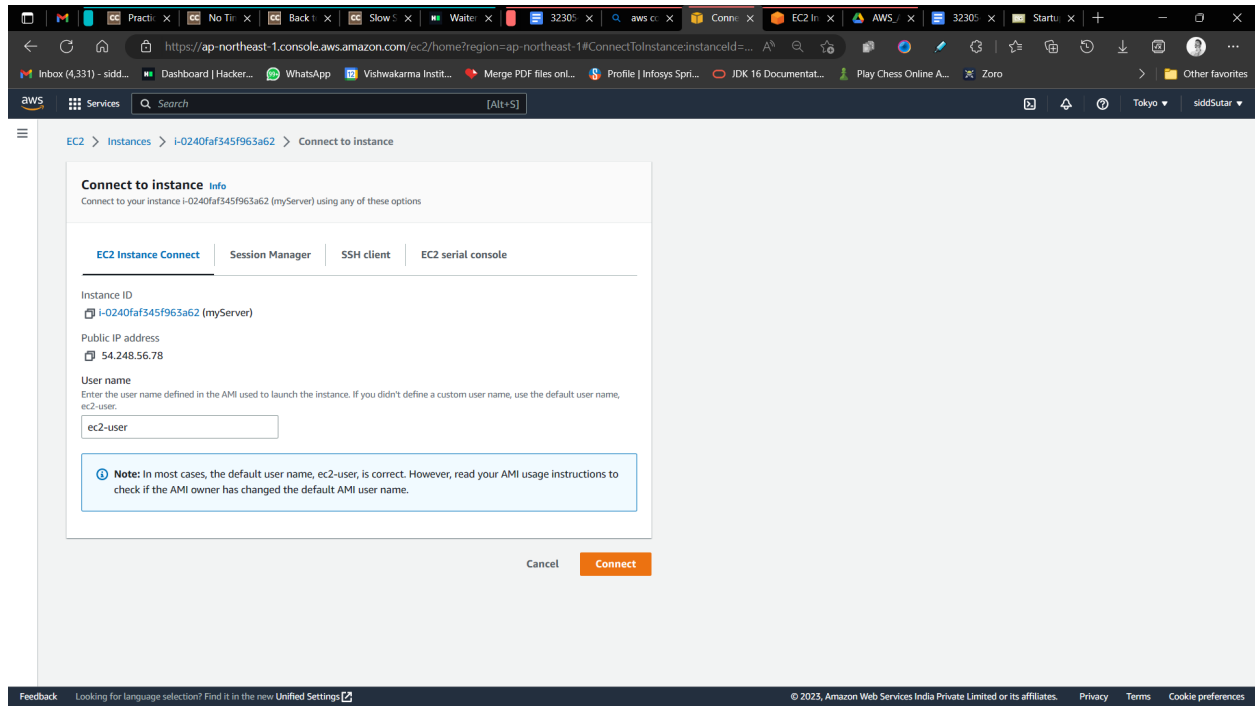


We will begin launching the instance after 2/2 status checks

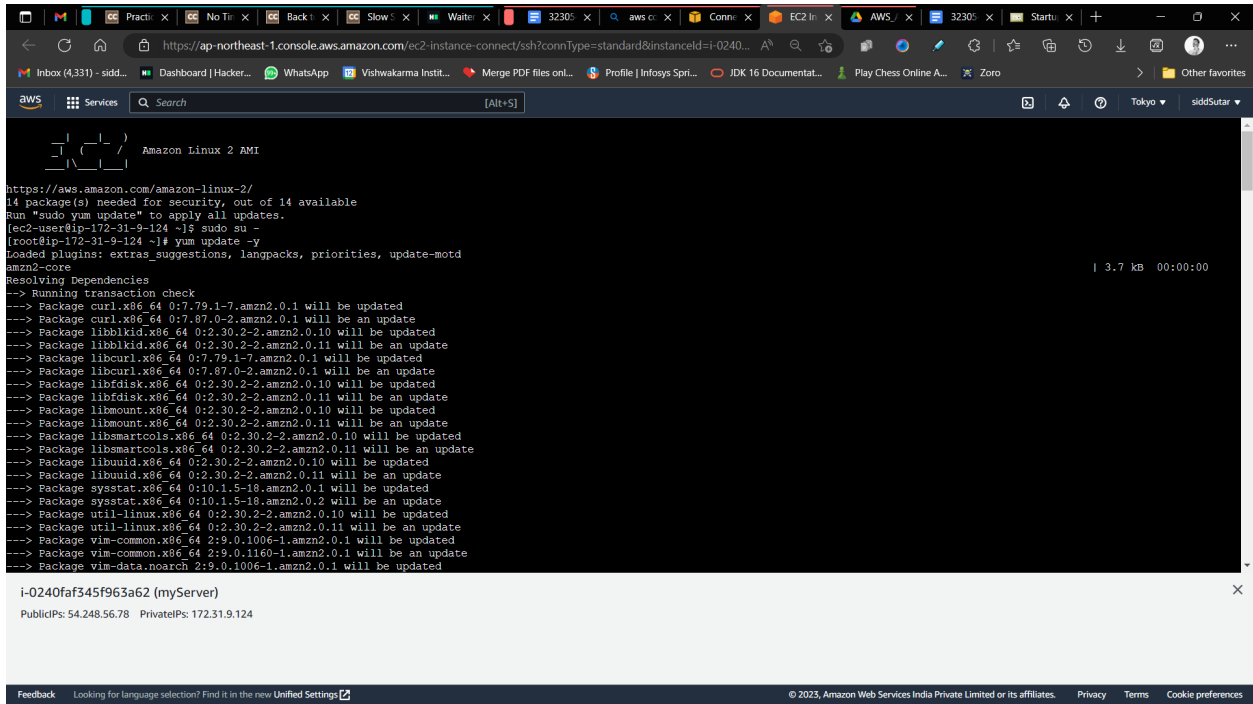


STEP 5

→ Launch the instance (Connect to the instance)

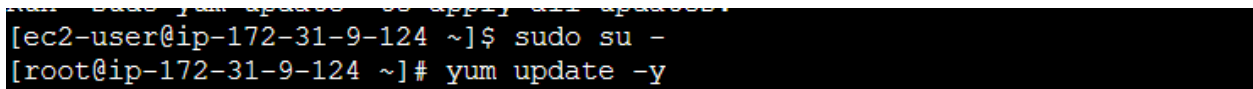


→ This terminal window shall open

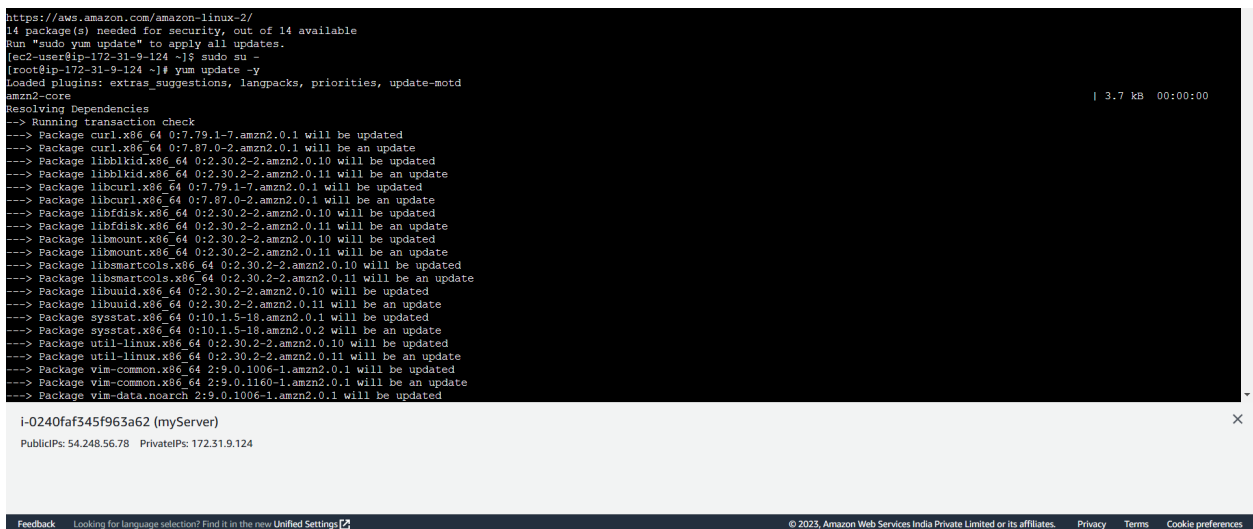


→ Put this commands in order

a) `sudo su -`



b) `yum update -y`



c) `yum install -y httpd`

```
[root@ip-172-31-9-124 ~]# yum install -y httpd
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.54-1.amzn2 will be installed
--> Processing Dependency: httpd-tools = 2.4.54-1.amzn2 for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: httpd filesystem = 2.4.54-1.amzn2 for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: system-logs-httpd for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: mod_http2 for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: httpd filesystem for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.54-1.amzn2.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.54-1.amzn2.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.7.0-9.amzn2 will be installed
--> Package apr-util.x86_64 0:1.6.1-5.amzn2.0.2 will be installed
--> Processing Dependency: apr-util-bdb(x86-64) = 1.6.1-5.amzn2.0.2 for package: apr-util-1.6.1-5.amzn2.0.2.x86_64
--> Package generic-logos-httpd.noarch 0:18.0.0-4.amzn2 will be installed
--> Package httpd filesystem.noarch 0:2.4.54-1.amzn2 will be installed
--> Package httpd-tools.x86_64 0:2.4.54-1.amzn2 will be installed
--> Package mailcap.noarch 0:2.1.41-2.amzn2 will be installed
--> Package mod_http2.x86_64 0:1.15.19-1.amzn2.0.1 will be installed
--> Running transaction check
--> Package apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved
```

Package	Arch	Version	Repository
Installing:			
httpd	x86_64	2.4.54-1.amzn2	amzn2-core

d) systemctl status httpd

```
[root@ip-172-31-9-124 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:httpd.service(8)
```

e) mkdir temp | cd temp

```
[root@ip-172-31-9-124 ~]# mkdir temp
[root@ip-172-31-9-124 ~]# cd temp
[root@ip-172-31-9-124 temp]# wget https://www.free-css.com/assets/files/free-css-templates/download/page288/startup.zip
```

f) wget

<https://www.free-css.com/assets/files/free-css-templates/download/page288/startup.zip>

- i) As I'm no web developer so I took a template from <https://www.free-css.com/free-css-templates> remember to place the download link in front of wget

```
[root@ip-172-31-9-124 temp]# wget https://www.free-css.com/assets/files/free-css-templates/download/page288/startup.zip
--2023-02-05 12:24:58-- https://www.free-css.com/assets/files/free-css-templates/download/page288/startup.zip
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:f000::28f
Connecting to www.free-css.com (www.free-css.com)[217.160.0.242]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 684565 (669K) [application/zip]
Saving to: 'startup.zip'

100%[=====]
2023-02-05 12:25:00 (467 KB/s) - 'startup.zip' saved [684565/684565]
```

g) unzip startup.zip

```
[root@ip-172-31-9-124 temp]# unzip startup.zip
Archive:  startup.zip
  inflating: startup-website-template/about.html
  inflating: startup-website-template/blog.html
  inflating: startup-website-template/contact.html
  creating: startup-website-template/css/
  inflating: startup-website-template/css/bootstrap.min.css
  inflating: startup-website-template/css/style.css
  inflating: startup-website-template/detail.html
  inflating: startup-website-template/feature.html
  creating: startup-website-template/img/
  inflating: startup-website-template/img/about.jpg
  inflating: startup-website-template/img/blog-1.jpg
  inflating: startup-website-template/img/blog-2.jpg
  inflating: startup-website-template/img/blog-3.jpg
  inflating: startup-website-template/img/carousel-1.jpg
  inflating: startup-website-template/img/carousel-2.jpg
  inflating: startup-website-template/img/feature.jpg
  inflating: startup-website-template/img/team-1.jpg
  inflating: startup-website-template/img/team-2.jpg
  inflating: startup-website-template/img/team-3.jpg
  inflating: startup-website-template/img/testimonial-1.jpg
  inflating: startup-website-template/img/testimonial-2.jpg
  inflating: startup-website-template/img/testimonial-3.jpg
  inflating: startup-website-template/img/testimonial-4.jpg
  inflating: startup-website-template/img/user.jpg
  inflating: startup-website-template/img/vendor-1.jpg
  inflating: startup-website-template/img/vendor-2.jpg
  inflating: startup-website-template/img/vendor-3.jpg
  inflating: startup-website-template/img/vendor-4.jpg
```

h) cd startup-website-template/

```
[root@ip-172-31-9-124 temp]# cd startup-website-template/
[root@ip-172-31-9-124 startup-website-template]# ls-lrt
-bash: ls-lrt: command not found
[root@ip-172-31-9-124 startup-website-template]# ls -lrt
total 400
-rw-r--r-- 1 root root 89601 Jul 27  2021 startup-website-template.jpg
-rw-r--r-- 1 root root 538 Aug 11  2021 READ-ME.txt
drwxr-xr-x 8 root root 99 Aug 11  2021 lib
drwxr-xr-x 2 root root 21 Aug 11  2021 js
drwxr-xr-x 2 root root 4096 Aug 11  2021 img
```

i) mv * /var/www/html/

```
[root@ip-172-31-9-124 startup-website-template]# mv * /var/www/html/
```

j) cd /var/www/html/

```
[root@ip-172-31-9-124 startup-website-template]# cd /var/www/html/
[root@ip-172-31-9-124 html]# ls -lrt
total 400
-rw-r--r-- 1 root root 89601 Jul 27  2021 startup-website-template.jpg
-rw-r--r-- 1 root root 538 Aug 11  2021 READ-ME.txt
drwxr-xr-x 8 root root 99 Aug 11  2021 lib
drwxr-xr-x 2 root root 21 Aug 11  2021 js
drwxr-xr-x 2 root root 4096 Aug 11  2021 img
drwxr-xr-x 2 root root 48 Aug 11  2021 css
-rw-r--r-- 1 root root 1456 Aug 16  2021 LICENSE.txt
-rw-r--r-- 1 root root 22799 Oct 19  2021 about.html
-rw-r--r-- 1 root root 38423 Oct 19  2021 blog.html
-rw-r--r-- 1 root root 20237 Oct 19  2021 contact.html
-rw-r--r-- 1 root root 30401 Oct 19  2021 detail.html
-rw-r--r-- 1 root root 19294 Oct 19  2021 testimonial.html
```

k) ls -lrt


```
[root@ip-172-31-9-124 html]# ls -lrt
total 400
-rw-r--r-- 1 root root 89601 Jul 27 2021 startup-website-template.jpg
-rw-r--r-- 1 root root 538 Aug 11 2021 READ-ME.txt
drwxr-xr-x 8 root root 99 Aug 11 2021 lib
drwxr-xr-x 2 root root 21 Aug 11 2021 js
drwxr-xr-x 2 root root 4096 Aug 11 2021 img
drwxr-xr-x 2 root root 48 Aug 11 2021 css
-rw-r--r-- 1 root root 1456 Aug 16 2021 LICENSE.txt
-rw-r--r-- 1 root root 22799 Oct 19 2021 about.html
-rw-r--r-- 1 root root 38423 Oct 19 2021 blog.html
-rw-r--r-- 1 root root 20237 Oct 19 2021 contact.html
-rw-r--r-- 1 root root 30401 Oct 19 2021 detail.html
-rw-r--r-- 1 root root 19294 Oct 19 2021 testimonial.html
-rw-r--r-- 1 root root 19029 Oct 19 2021 feature.html
-rw-r--r-- 1 root root 52988 Oct 19 2021 index.html
-rw-r--r-- 1 root root 24975 Oct 19 2021 price.html
-rw-r--r-- 1 root root 19602 Oct 19 2021 quote.html
-rw-r--r-- 1 root root 24329 Oct 19 2021 service.html
-rw-r--r-- 1 root root 20123 Oct 19 2021 team.html
```

l) systemctl enable httpd | systemctl start httpd

```
[root@ip-172-31-9-124 html]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-9-124 html]# system start httpd
-bash: system: command not found
[root@ip-172-31-9-124 html]# sysytemctl start httpd
-bash: sysytemctl: command not found
[root@ip-172-31-9-124 html]# sytemctl start httpd
-bash: sytemctl: command not found
[root@ip-172-31-9-124 html]# systemctl start httpd
```

m) systemctl status httpd

```
[root@ip-172-31-9-124 html]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Sun 2023-02-05 12:37:24 UTC; 22s ago
     Docs: man:httpd.service(8)
   Main PID: 4034 (httpd)
   Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
   CGroup: /system.slice/httpd.service
           └─4034 /usr/sbin/httpd -DFOREGROUND
             └─4035 /usr/sbin/httpd -DFOREGROUND
               └─4036 /usr/sbin/httpd -DFOREGROUND
                 └─4037 /usr/sbin/httpd -DFOREGROUND
                   └─4038 /usr/sbin/httpd -DFOREGROUND
                     └─4039 /usr/sbin/httpd -DFOREGROUND

Feb 05 12:37:24 ip-172-31-9-124.ap-northeast-1.compute.internal systemd[1]: Starting The Apache HTTP Server...
Feb 05 12:37:24 ip-172-31-9-124.ap-northeast-1.compute.internal systemd[1]: Started The Apache HTTP Server.
```

STEP 6

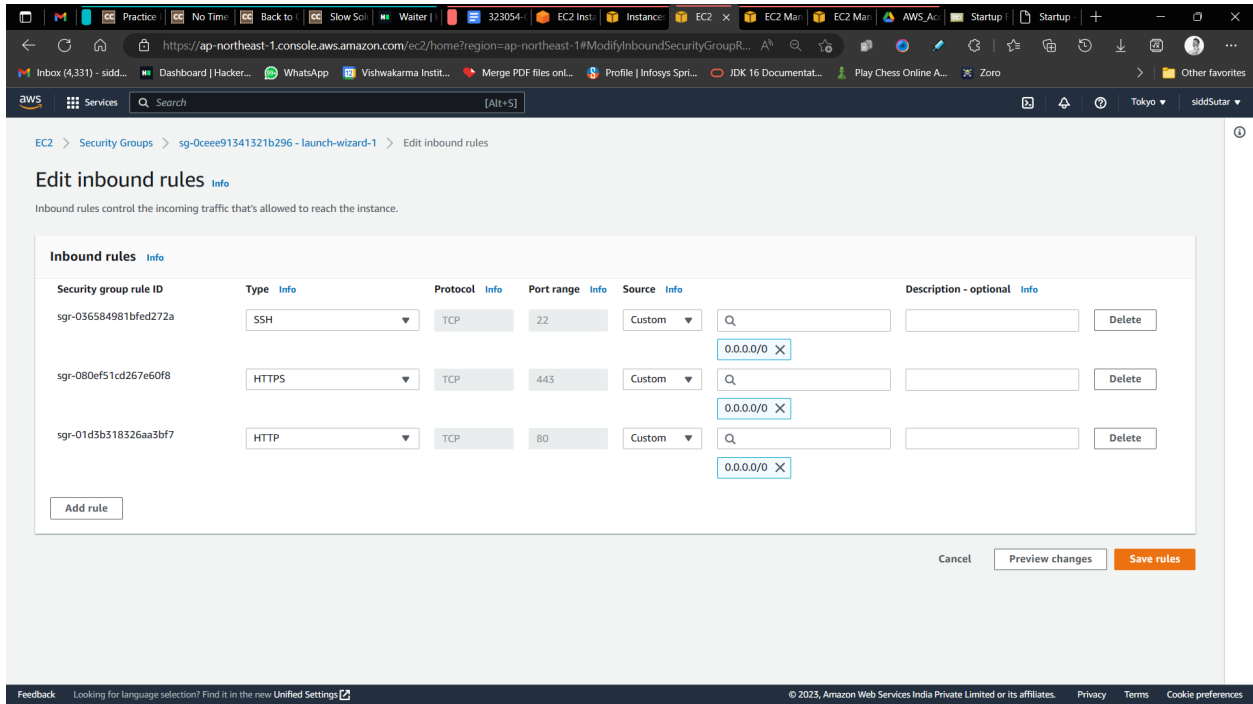
→ Change the inbound rules from security by simply clicking on launch wizard first

The screenshot shows the AWS Management Console for the 'Instances' page. The instance 'myServer' (i-0240faf345f963a62) is in a 'Running' state. The 'Inbound rules' section is expanded, showing three rules: 'sg-036584981bfed272a' (SSH), 'sg-080ef51cd267e60f8' (HTTPS), and 'sg-01d3b318326aa3bf7' (HTTP). An arrow points to the 'Security groups' column, which lists 'launch-wizard-1' for each rule.

→ Click on edit inbound rules

The screenshot shows the AWS Management Console for the 'Security Groups' page. The security group 'launch-wizard-1' (sg-0ceee91341321b296) is selected. The 'Inbound rules (3)' section is expanded, showing three rules: 'sg-036584981bfed272a' (SSH), 'sg-080ef51cd267e60f8' (HTTPS), and 'sg-01d3b318326aa3bf7' (HTTP). The 'Edit inbound rules' button is visible.

→ Add HTTP and HTTPS like the configuration given below



STEP 7

→ Copy and paste the public IP to the browser to see the web template hosted



STEP 8

→ Stop the instance & terminate it

