

# Cloud Computing Laboratory Week-2

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PES1201800102

6-D

Roll No.: 6

## Task-A

1a

The screenshot displays the AWS Management Console interface. The top navigation bar includes the AWS logo, a search bar, and the user's account information (vostartsoft/user1211683-vishruthreddy@gmail.com). The left sidebar shows the navigation menu with categories like EC2 Dashboard, Instances, Images, Elastic Block Store, and Network & Security. The main content area is titled 'Instances (1/1)' and shows a table with one instance: PES1201800102, which is in a 'Running' state. Below the table, the 'Details' tab for instance i-04b72b724d511afc7 is selected, showing fields for Instance ID, Instance state, Instance type, Public IPv4 address, Private IPv4 addresses, Public IPv4 DNS, Private IPv4 DNS, Elastic IP addresses, VPC ID, and Subnet ID. A warning message from AWS Compute Optimizer is visible, stating that the user is not authorized to perform certain actions on the resource.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
PES1201800102	i-04b72b724d511afc7	Running	t2.micro	–	No alarms	us-east-1c	ec2-54-221-166-213.c...	54.221.166.213	–

**Instance: i-04b72b724d511afc7 (PES1201800102)**

**Instance summary**

Instance ID: i-04b72b724d511afc7 (PES1201800102)

Instance state: Running

Instance type: t2.micro

Public IPv4 address: 54.221.166.213 | open address

Private IPv4 addresses: 172.31.21.180

Public IPv4 DNS: ec2-54-221-166-213.compute-1.amazonaws.com | open address

Private IPv4 DNS: ip-172-31-21-180.ec2.internal

Elastic IP addresses: –

VPC ID: vpc-3d8f72040

Subnet ID: subnet-b83268f5

**Instance details**

AWS Compute Optimizer finding: User: arn:aws:sts::716246579049:assumed-role/vostartsoft/user1211683-vishruthreddy@gmail.com is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: \* with an explicit deny. Retry

## 2a

```
ubuntu@ip-172-31-21-180: ~$ sudo systemctl status apache2
Processing triggers for ufw (0.36-ubuntu0.18.04.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
ubuntu@ip-172-31-21-180:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset:
   Drop-In: /lib/systemd/system/apache2.service.d
            └─apache2-systemd.conf
   Active: active (running) since Sat 2021-01-30 18:05:54 UTC; 1min 21s ago
     Main PID: 2638 (apache2)
       Tasks: 55 (limit: 1140)
      CGroup: /system.slice/apache2.service
              └─2638 /usr/sbin/apache2 -k start
                 2640 /usr/sbin/apache2 -k start
                 2641 /usr/sbin/apache2 -k start

Jan 30 18:05:53 ip-172-31-21-180 systemd[1]: Starting The Apache HTTP Server...
Jan 30 18:05:54 ip-172-31-21-180 systemd[1]: Started The Apache HTTP Server.
Hint: [172.31.21.180] - skipping...
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Drop-In: /lib/systemd/system/apache2.service.d
            └─apache2-systemd.conf
   Active: active (running) since Sat 2021-01-30 18:05:54 UTC; 1min 21s ago
     Main PID: 2638 (apache2)
       Tasks: 55 (limit: 1140)
      CGroup: /system.slice/apache2.service
              └─2638 /usr/sbin/apache2 -k start
                 2640 /usr/sbin/apache2 -k start
                 2641 /usr/sbin/apache2 -k start

Jan 30 18:05:53 ip-172-31-21-180 systemd[1]: Starting The Apache HTTP Server...
Jan 30 18:05:54 ip-172-31-21-180 systemd[1]: Started The Apache HTTP Server.
```

## 3a

EC2 Management Console

console.aws.amazon.com/ec2/v2/home?region=us-east-1#SecurityGroupssecurityGroupId=sg-07e97b8a751c33cdf

sg-07e97b8a751c33cdf - launch-wizard-5

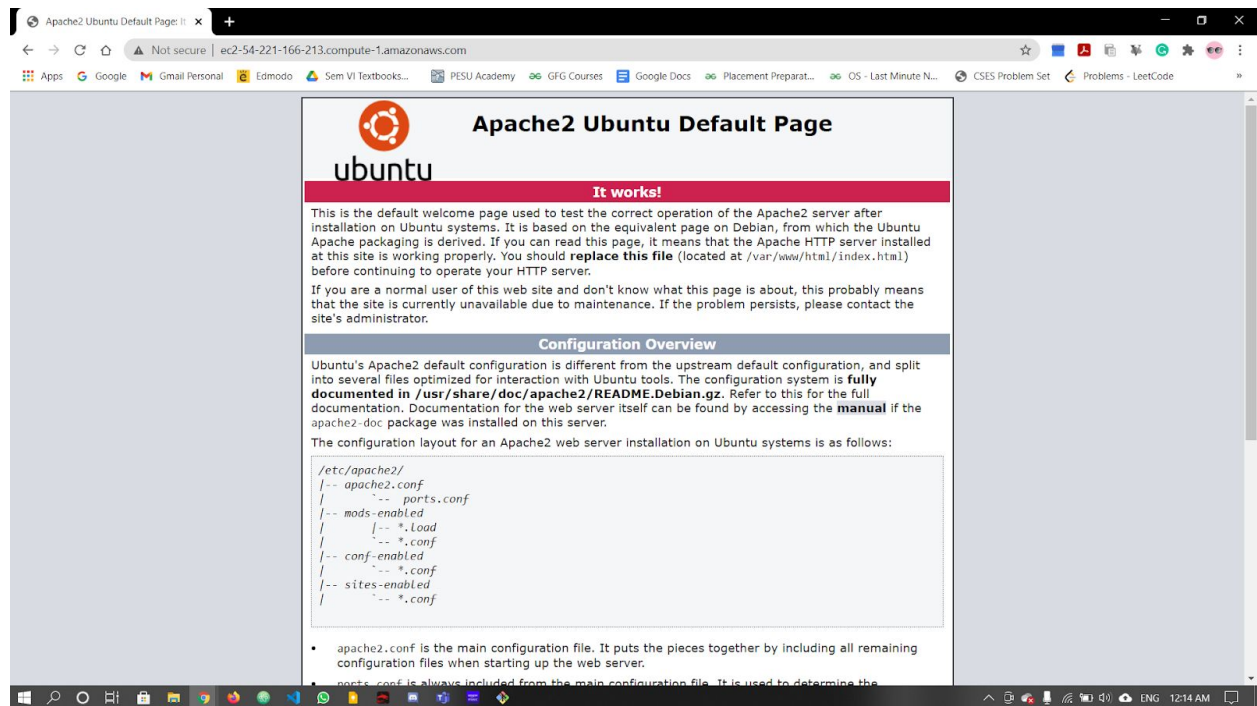
Details

Security group name	Security group ID	Description	VPC ID
launch-wizard-5	sg-07e97b8a751c33cdf	launch-wizard-5 created 2021-01-31 17:09:25.021+05:30	vpc-3d872040
Owner	Inbound rules count	Outbound rules count	
716246579049	3 Permission entries	1 Permission entry	

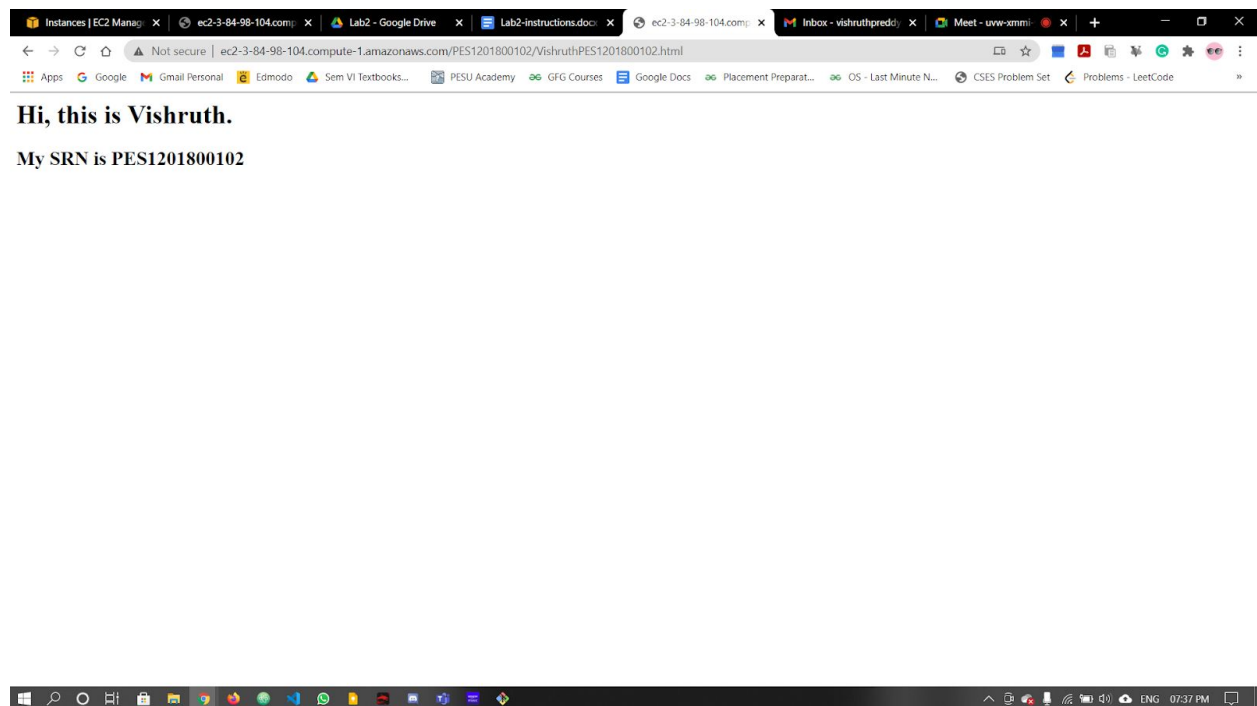
Inbound rules

Type	Protocol	Port range	Source	Description - optional
HTTP	TCP	80	0.0.0.0/0	-
HTTP	TCP	80	:/0	-
SSH	TCP	22	0.0.0.0/0	-

3b



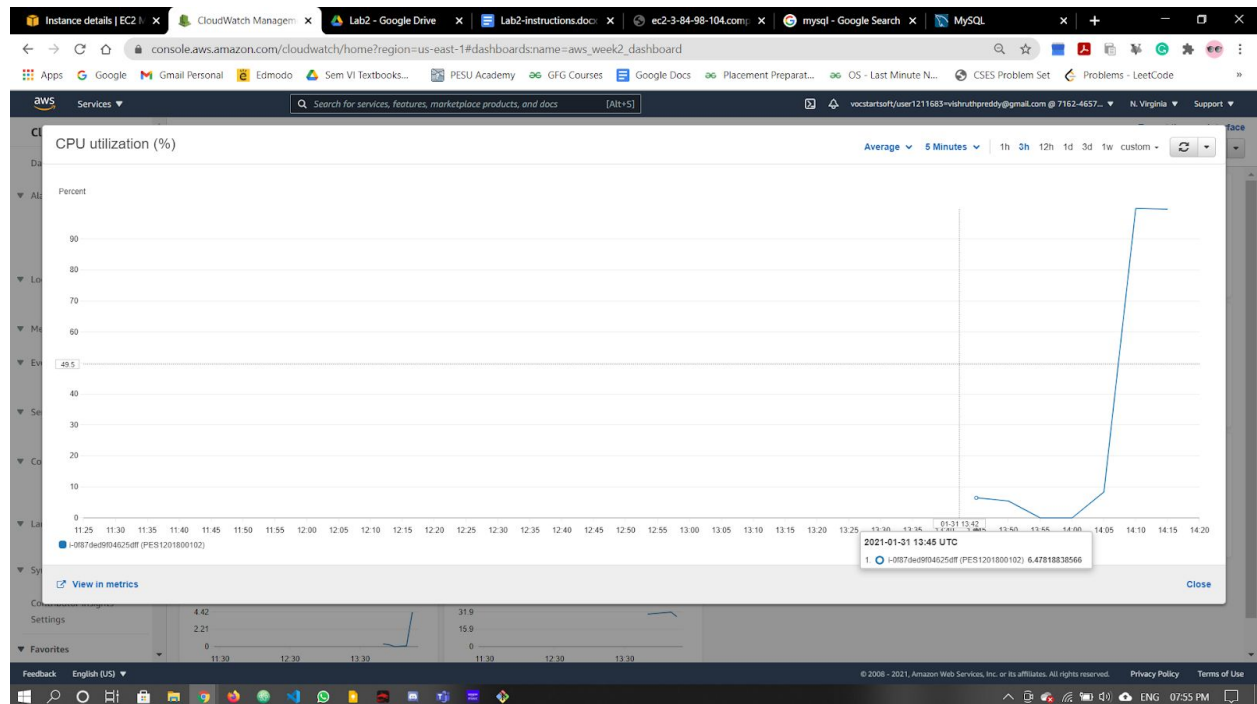
4a



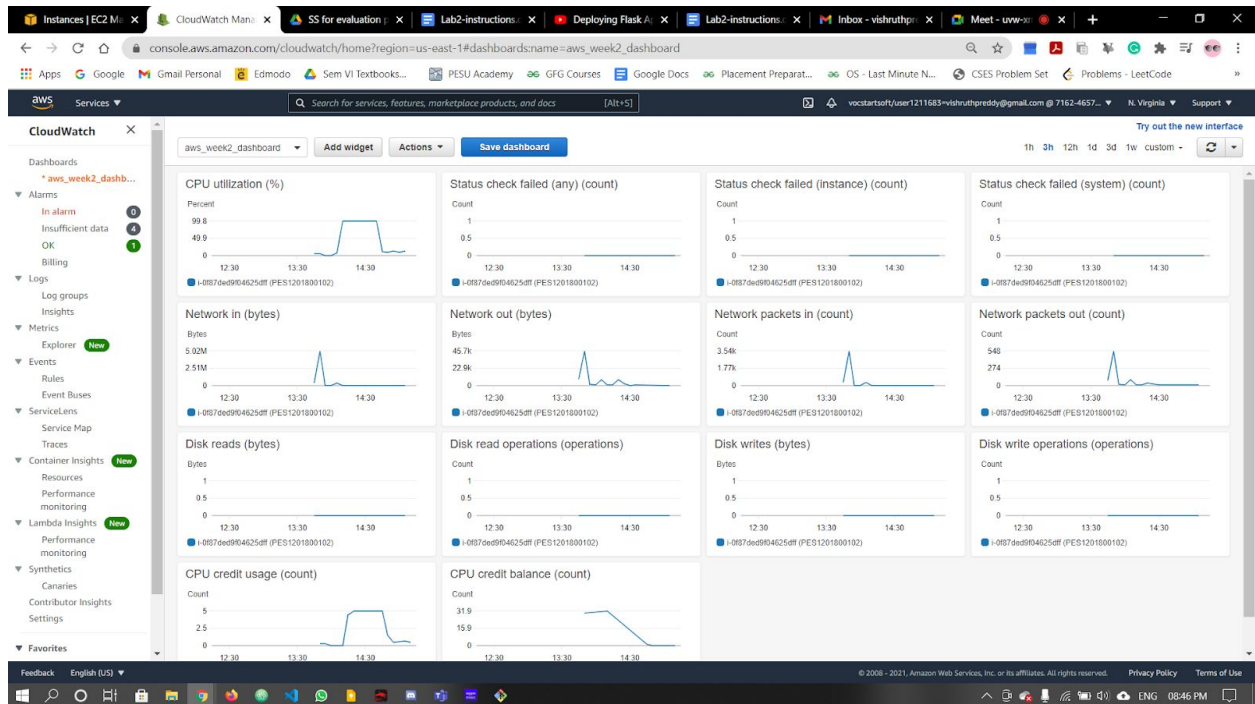
5a

```
ubuntu@ip-172-31-22-6:/var/www/html/PES1201800102$  
/body-  
/html-  
ubuntu@ip-172-31-22-6:/var/www/html/PES1201800102$ ab -k -c 100 -n 1000 http://ec2-3-84-98-104.compute-1.amazonaws.com/PES1201800102/VishruthPES1201800102.html  
This is ApacheBench, Version 2.3 <Revision: 1807734 >  
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/  
Licensed to The Apache Software Foundation, http://www.apache.org/  
  
Benchmarking ec2-3-84-98-104.compute-1.amazonaws.com (be patient)  
Completed 100 requests  
Completed 200 requests  
Completed 300 requests  
Completed 400 requests  
Completed 500 requests  
Completed 600 requests  
Completed 700 requests  
Completed 800 requests  
Completed 900 requests  
Completed 1000 requests  
Finished 1000 requests  
  
Server Software: Apache/2.4.29  
Server Hostname: ec2-3-84-98-104.compute-1.amazonaws.com  
Server Port: 80  
  
Document Path: /PES1201800102/VishruthPES1201800102.html  
Document Length: 98 bytes  
  
Concurrency Level: 100  
Time taken for tests: 0.141 seconds  
Complete requests: 1000  
Failed requests: 75  
  (Connect: 0, Receive: 0, Length: 75, Exceptions: 0)  
Keep-Alive requests: 925  
Total transferred: 372950 bytes  
HTML transferred: 90650 bytes  
Requests per second: 7067.64 [#/sec] (mean)  
Time per request: 14.149 [ms] (mean)  
Time per request: 0.141 [ms] (mean, across all concurrent requests)  
Transfer rate: 2574.10 [Kbytes/sec] received  
  
Connection Times (ms)  
min mean[+/-sd] median max  
Connect: 0 0 1.3 0 5  
Processing: 0 13 23.8 6 116  
Waiting: 0 12 23.8 6 116  
Total: 0 13 23.8 7 116  
  
Percentage of the requests served within a certain time (ms)  
50% 7  
66% 8  
75% 8  
80% 11  
90% 30  
95% 86  
98% 115  
99% 115  
100% 116 (longest request)  
ubuntu@ip-172-31-22-6:/var/www/html/PES1201800102$
```

5b

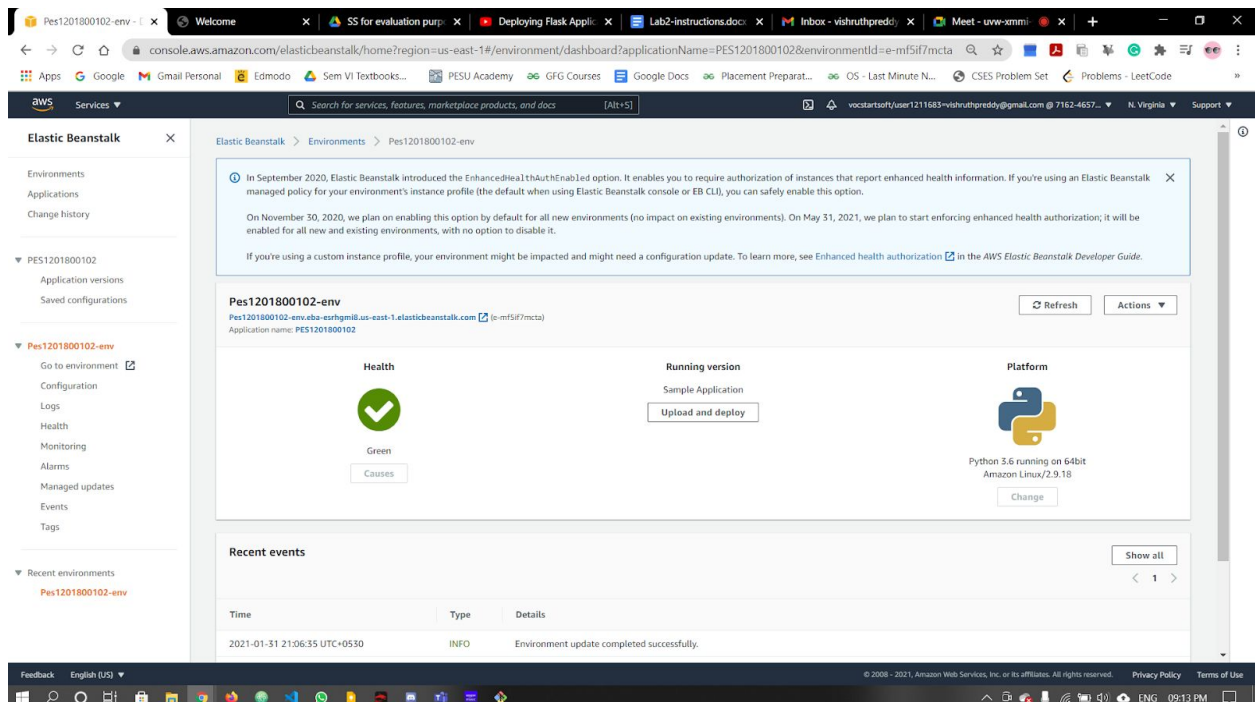


5c



Task-B

B1



## B2

The screenshot shows the Amazon RDS console for an instance named `aasbpccder7bl0`. The **Summary** tab is active, displaying the following details:

- DB Identifier:** `aasbpccder7bl0`
- CPU:** 2.17%
- Status:** Available
- Class:** `db.t2.micro`
- Role:** Instance
- Current activity:** 0 Connections
- Engine:** MySQL Community
- Region & AZ:** us-east-1f

The **Connectivity & security** tab is also visible, showing:

- Endpoint & port:** Endpoint is `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com`, Port is `3306`.
- Networking:** Availability zone is `us-east-1f`, VPC is `vpc-3d872040`, Subnet group is `default`, and Subnets include `subnet-97b239f1`, `subnet-bba4748a`, `subnet-b69b0a97`, `subnet-95ade09b`, `subnet-a11f88fe`, and `subnet-b83268f5`.
- Security:** VPC security groups include `rds-awsdb-e-nfsf7mcta-stack-awsdb-dbsubsecuritygroup-1pur5potd5sda-mch8 (sp-07548ab1d9662de9c)` (active). Public accessibility is `Yes`. Certificate authority is `rds-ca-2019` with a date of `Aug 22nd, 2024`.

The bottom of the console shows the URL `https://console.aws.amazon.com/rds/home?region=us-east-1#subnets:filter=subnet-a11f88fe` and the AWS logo.

## B3

The screenshot shows the Postman application interface. The **History** tab is active, displaying a list of recent requests:

- POST** `http://pes1201800102-env.eba-esrhgm8.us-east-1.elasticbeanstalk.com/api/register`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/verify`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com`
- GET** `http://aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com`
- GET** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`
- GET** `https://www.google.com/search?newwindow=1&scrf=ALeK03Ujg3U0v_Q12GxmTU3sNNh-Q2NcW3A161211248134&source=hp&ei=kN...`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`
- POST** `aasbpccder7bl0.cw1tbghfqbz.us-east-1.rds.amazonaws.com/api/register`

The **Untitled Request** tab is active, showing a **POST** request to `http://pes1201800102-env.eba-esrhgm8.us-east-1.elasticbeanstalk.com/api/register`. The request body is in **JSON** format:

```
{  "uname": "Vishruth",  "pswd": "querty",  "age": 22,  "mob": 8050569402}
```

The status bar at the bottom shows **Status: 200 OK**, **Time: 591 ms**, and **Size: 193 B**.



# B4

Postman

File Edit View Help

+ New Import Runner

My Workspace Invite

No Environment

Filter

History Collections APIs

Save Responses Clear all

Today

- POST http://pes1201800102-env.eba-esrhgm8.us-east-1.elasticbeanstalk.com/api/verify
- POST http://pes1201800102-env.eba-esrhgm8.us-east-1.elasticbeanstalk.com/api/register
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com/api/verify
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com
- GET http://aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com
- GET aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com/api/register
- GET https://www.google.com/search?newwindow=1&scrf=ALeK03Ug83Uxv\_Q12QmTU3sNNh-Q2NcA9k3A1612111248134&source=hp&ei=kN...
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com/api/register
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com/api/register
- POST aasbpccsder7bl0.c6w1tbghfqb.x.us-east-1.rds.amazonaws.com

Untitled Request

POST http://pes1201800102-env.eba-esrhgm8.us-east-1.elasticbeanstalk.com/api/verify

Send Save

Params Authorization Headers (8) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "uname": "Vishruth",
3   "pswd": "qerty"
4 }
5
```

Body Cookies Headers (5) Test Results

Status: 200 OK Time: 239 ms Size: 233 B Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   112,
3   "Vishruth",
4   "qerty",
5   22,
6   "8050569402"
7 }
```

Find and Replace Console

Bootcamp Build Browse

10:24 PM