

**Computer Science & Engineering
Department
National Institute of Technology, Delhi**



ASSIGNMENT

NETWORK PROGRAMMING

SUBMITTED TO:

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SUBMITTED BY:

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CSE - 3RD YEAR

CLOUD SERVICE USED : AMAZON WEB SERVICES - LIGHTSAIL

REASON FOR USING LIGHTSAIL SERVICE:

- Lightsail is the easiest way to get started with AWS for developers, students, and other users who need a simple virtual private server (VPS) solution. So, It was serving the requirement needed for assignment.
- Here, We can get preconfigured virtual private server plans that include everything to easily deploy and manage our application. Lightsail is best suited to projects that require a few virtual private servers and users who prefer a simple management interface.
- Common use cases for Lightsail include running websites, web applications, blogs, e-commerce sites, simple software, and more.
- Lightsail includes everything you need to launch your project quickly – a virtual machine, SSD-based storage, data transfer, DNS management, and a static IP. All these things can be set by using the few simple clicks and launching it was way much easier.
- As, I wanted to use the service temporarily, so the free 1 month tier helped me.

What is Lightsail ?

- A Lightsail instance is a virtual private server (VPS) that lives in the AWS Cloud.
- Use your Lightsail instances to store our data, run our code, and build web-based applications or websites.
- The instances created by user can connect to each other and to other AWS resources through both public (Internet) and private (VPC) networking.
- We can create, manage, and connect easily to instances right from the Lightsail console.

▼ Account Settings

Edit

Account Id:

337589385304

Account Name:

Binshumesh Sachan

Password:

▼ Contact Information

Edit

Please note that updating your contact information on this page will not update the information displayed on your PDF Invoices. If you wish to update the billing address information associated with your Invoice, please edit it through the Payment Methods page, located [here](#).

Full Name:

Binshumesh Sachan

Address:

#60, Type-3, PGI Campus, Sector-12

City:

Chandigarh

State:

Chandigarh

Postal Code:

160012

Country:

IN

Phone Number:

7986343215

Company Name:

Website URL:

FIG-1: Proof that account has been created.

Amazon Lightsail

Home

Docs

Search

Account

AWS

Billing

Binshumesh Sachan

Account ID:
337589385304

This ID is shared by your AWS and Lightsail accounts.

Profile & contacts

SSH keys

Advanced

Profile & AWS preferences

Lightsail uses your AWS profile. You can manage your billing methods, personal information, email preferences, and other account settings in the AWS Billing Management Console.

[Manage your AWS profile](#)

Notification contacts

You can add a contact for each AWS Region that will receive notifications about


Questions? Comments?

©2008-2020, Amazon Web Services, Inc. or its affiliates. All rights reserved. [Privacy Policy](#) [Terms of Use](#) [English](#)

FIG-2: Proof that Amazon Lightsail service is used.


Create an instance

Instance location?

 You are creating this instance in **Mumbai, Zone A** (ap-south-1a)
[Change AWS Region and Availability Zone](#)

Pick your instance image?

Select a platform

 **Linux/Unix**
22 blueprints



 **Microsoft Windows**
3 blueprints


FIG-3(a): Lightsail Instance Creation Step-1


Select a blueprint


Apps + OS


OS Only


 **Amazon Linux**
2018.03.0.202...


 **Ubuntu**
16.04 LTS


 **Ubuntu**
18.04 LTS

 **Debian**
8.7

 **Debian**
9.5

 **FreeBSD**
12.1

 **openSUSE**
15.1

 **CentOS**
7 1901-01

Ubuntu 18.04 LTS
Ubuntu 18.04 LTS - Bionic. Lean, fast and powerful, Ubuntu Server delivers services reliably, predictably and economically. It is the perfect base on which to build your instances. Ubuntu is free and will always be, and you have the option to get support and Landscape from Canonical.
[Learn more about Ubuntu on the AWS Marketplace](#) .
By using this image, you agree to the provider's [End User License Agreement](#) .

FIG-3(b): Lightsail Instance Creation Step-2

Choose your instance plan [?](#)

New! Check out our new 16 GB and 32 GB RAM bundles!

Sort by: **Price per month** Memory Processing Storage Transfer

First month free!

\$3.5

USD

\$5

USD

\$10

USD

\$20

USD

\$40

USD

\$3.50 USD	\$5 USD	\$10 USD	\$20 USD	\$40 USD	Price per month
512 MB	1 GB	2 GB	4 GB	8 GB	Memory
1 vCPU	1 vCPU	1 vCPU	2 vCPUs	2 vCPUs	Processing
20 GB SSD	40 GB SSD	60 GB SSD	80 GB SSD	160 GB SSD	Storage
512 GB	1 TB	1.5 TB	2 TB	2.5 TB	Transfer

You can try the selected plan free for one month (up to 750 hours).

i Plans in Mumbai include lower data transfer allowances than other regions. [Learn more](#)

FIG-3(c): Lightsail Instance Creation Step-3

Identify your instance

Your Lightsail resources must have unique names.

Ubuntu-2

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TAGGING OPTIONS

Use tags to filter and organize your resources in the Lightsail console. Key-value tags can also be used to organize your billing, and to control access to your resources. [Learn more about tagging.](#)

Key-only tags [?](#)

+ Add key-only tags

Key-value tags [?](#)

+ Add key-value tag

Create instance

FIG-3(c): Lightsail Instance Creation Step-4

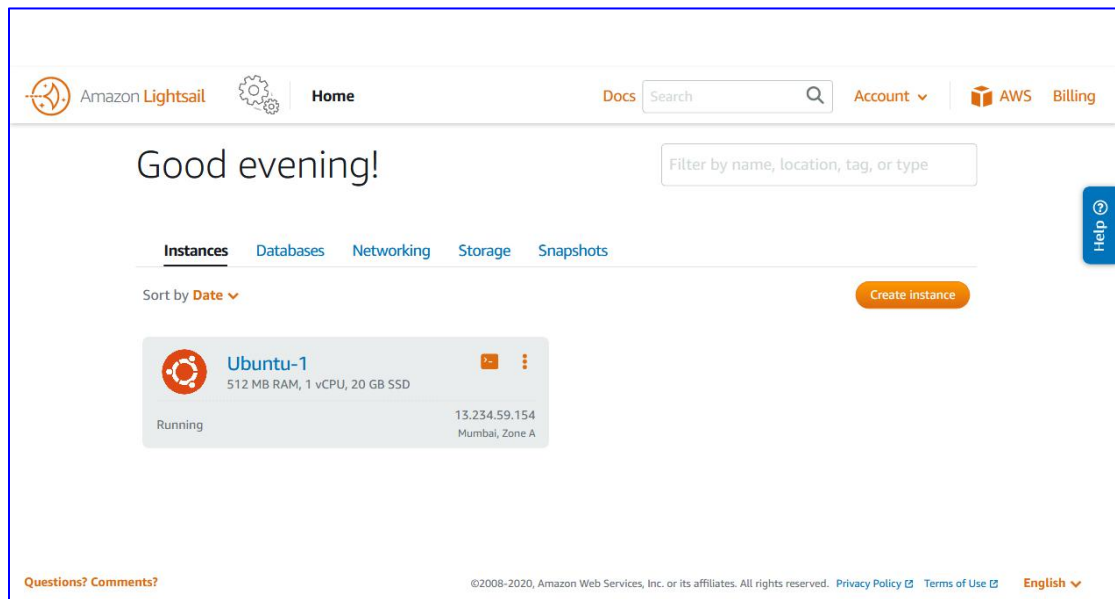
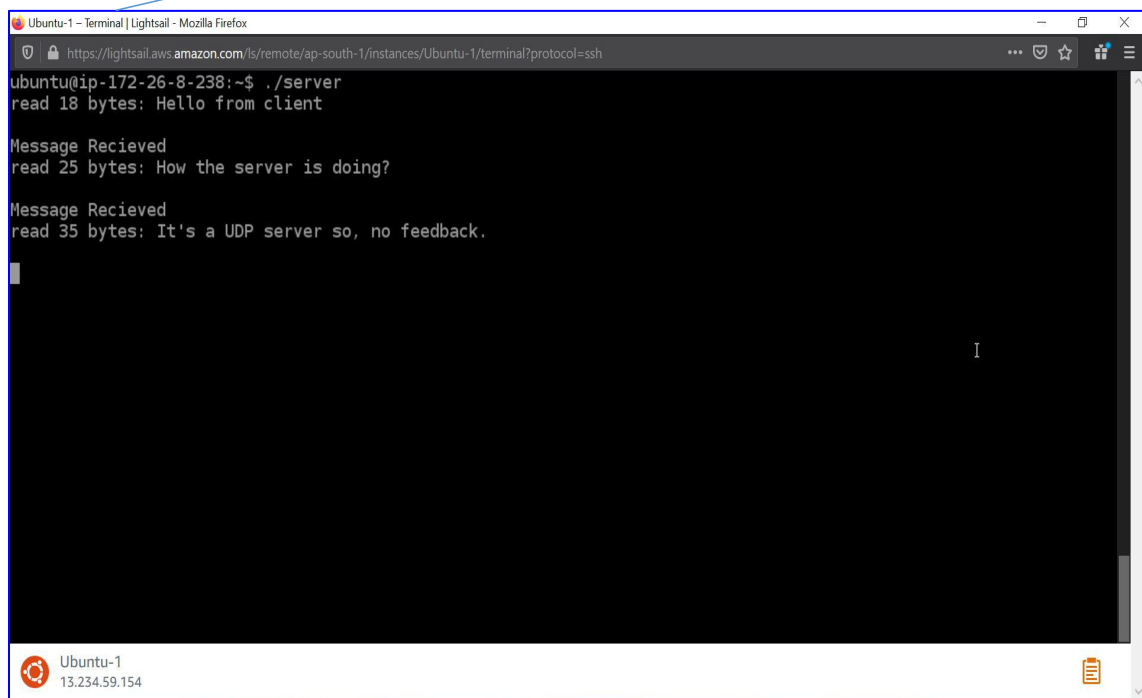


FIG-4: Shows Lightsail Instance in Running State

OUTPUT:

Shows lightsail terminal is opened in firefox.



Shows, this server is running on Ubuntu which has public I/p mentioned.

FIG-5: Server output in Lightsail Terminal

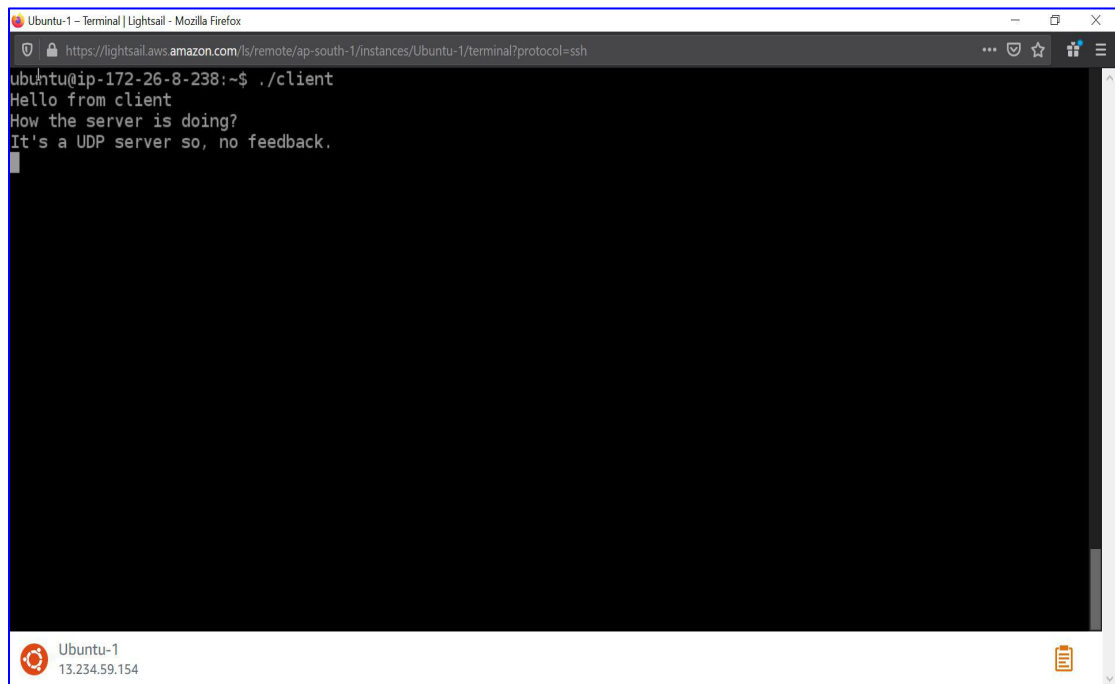


FIG-6: Client output in Lightsail Terminal