CreateVpc | VPC Console   ×   Instances | EC2 | ap-sout   ×   +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateVpc:createMode=vpcOnly

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC > Your VPCs > Create VPC

Create VPC Info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Resources to create Info
Create only the VPC resource or the VPC and other networking resources.

(●) VPC only   (○) VPC and more

Name tag - *optional*
Creates a tag with a key of 'Name' and a value that you specify.

> my-vpc

IPv4 CIDR block Info
(●) IPv4 CIDR manual input
(○) IPAM-allocated IPv4 CIDR block

IPv4 CIDR

> 192.168.0.0/16

CIDR block size must be between /16 and /28.

IPv6 CIDR block Info
(●) No IPv6 CIDR block
(○) IPAM-allocated IPv6 CIDR block
(○) Amazon-provided IPv6 CIDR block
(○) IPv6 CIDR owned by me

Tenancy Info

> Default   ▼

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - *optional*	
Q Name ×	Q my-vpc ×	Remove tag

Add tag

You can add 49 more tags.

Cancel   Preview code   **Create VPC**

vpcs | VPC Console ×   Instances | EC2 | ap-south ×   +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#vpcs:

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC dashboard   ⟨

EC2 Global View ↗

Filter by VPC: ▼

▼ **Virtual private cloud**

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▼ **PrivateLink and Lattice**

Getting started **Updated**
Endpoints **Updated**
Endpoint services
Service networks **Updated**
Lattice services
Resource configurations **New**

ⓘ ◇ 🖵

Your VPCs (1/2) Info   Last updated about 1 hour ago ↻   Actions ▼   **Create VPC**

Q Search   ⟨ 1 ⟩ ⚙

	Name	▼	VPC ID	▼	State	▼	Block Public...	▼	IPv4 CIDR	▼	IPv6 CIDR	▼	DHCP option set	▼	Main route table
☐	main-VPC		vpc-086acf965e03b88ed		⊘ Available		⊖ Off		172.31.0.0/16		–		dopt-0d4c2acd2159d6...		rtb-018542cf50b(
☑	my-vpc		vpc-048ac18cdb202b214		⊘ Available		⊖ Off		192.168.0.0/16		–		dopt-0d4c2acd2159d6...		rtb-02275d78005

vpc-048ac18cdb202b214 / my-vpc

Details   Resource map   CIDRs   Flow logs   Tags   Integrations

Details

VPC ID
⧉ vpc-048ac18cdb202b214

State
⊘ Available

Block Public Access
⊖ Off

DNS hostnames
Disabled

DNS resolution
Enabled

Tenancy
default

DHCP option set
dopt-0d4c2acd2159d6b46

Main route table
rtb-02275d7800523728a

Main network ACL
acl-0ca6deeb8aaecba7d

Default VPC
No

IPv4 CIDR
192.168.0.0/16

IPv6 pool
–

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VPC | ap-south-1   Instances | EC2 | ap-south   +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateSubnet:

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC > Subnets > Create subnet

Create subnet Info

VPC

VPC ID
Create subnets in this VPC.

vpc-048ac18cdb202b214 (my-vpc) ▼

Associated VPC CIDRs

IPv4 CIDRs
192.168.0.0/16

Subnet settings
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name
Create a tag with a key of 'Name' and a value that you specify.

web-subnet

The name can be up to 256 characters long.

Availability Zone Info
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

Asia Pacific (Mumbai) / ap-south-1a ▼

IPv4 VPC CIDR block Info
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

192.168.0.0/16 ▼

IPv4 subnet CIDR block

192.168.16.0/20	4,096 IPs

‹   ›   ^   ∨

▼ **Tags - *optional***

Key	Value - *optional*	
Q Name ✕	Q web-subnet ✕	Remove

Add new tag

You can add 49 more tags.

Remove

subnets | VPC Console   Instances | EC2 | ap-south   +

← → C ⌂ ⚏ ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#subnets: ☆ Ⓢ :

🔲   M gmail   Console Home…   ▶ YouTube   ChatGPT   🗀 All Bookmarks

aws   ⚏   Q Search   [Alt+S]   ⌨ 🔔 ⑦ ⚙   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

🟧 EC2   🟣 VPC   🟩 Billing and Cost Manage…

VPC dashboard   ‹

EC2 Global View ⬈

Filter by VPC: ▼

▼ **Virtual private cloud**

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Subnets (1/5) Info   Last updated about 1 hour ago ↻   Actions ▼   **Create subnet**

Q Find resources by attribute or tag   ‹ 1 › ⚙

	Name ▼	Subnet ID ▼	State ▼	VPC ▼	Block Public... ▼	IPv4 CIDR ▼	IPv6 CIDR ▼	IPv6 CI
☐	db-subnet	subnet-02c49c5462a752681	⊘ Available	vpc-048ac18cdb202b214	my-...	⊖ Off	192.168.16.0/24	–	–
☐	–	subnet-0d13bc377f21851cc	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.16.0/20	–	–
☐	–	subnet-088dc469bd35b3774	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.32.0/20	–	–
☑	web-subnet	subnet-046f804c3504b308c	⊘ Available	vpc-048ac18cdb202b214	my-...	⊖ Off	192.168.0.0/20	–	–
☐	–	subnet-0015550bb08d693bc	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.0.0/20	–	–

subnet-046f804c3504b308c / web-subnet

Details | Flow logs | Route table | Network ACL | CIDR reservations | Sharing | Tags

Details

Subnet ID
🗗 subnet-046f804c3504b308c

IPv4 CIDR
🗗 192.168.0.0/20

Availability Zone
🗗 ap-south-1a

Route table

Subnet ARN
🗗 arn:aws:ec2:ap-south-1:943143228347:subnet/subnet-046f804c3504b308c

Available IPv4 addresses
🗗 4091

Availability Zone ID
🗗 aps1-az1

State
⊘ Available

IPv6 CIDR
–

Network border group
🗗 ap-south-1

Default subnet

Block Public Access
⊖ Off

IPv6 CIDR association ID
–

VPC
vpc-048ac18cdb202b214 | my-vpc

Auto-assign public IPv4 address

VPC | ap-south-1 | Instances | EC2 | ap-south | +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#CreateRouteTable:

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC > Route tables > Create route table

Create route table Info

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.

    my-rt

VPC
The VPC to use for this route table.

    vpc-048ac18cdb202b214 (my-vpc)   ▼

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key   **Value - optional**

    Q Name   ✕   Q my-rt   ✕   Remove

Add new tag

You can add 49 more tags.

Cancel   Create route table

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VPC | ap-south-1   Instances | EC2 | ap-south   +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRouteTableSubnetAssociations:RouteTableId=rtb-0c1d9022c6d9d1e2d

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC > Route tables > rtb-0c1d9022c6d9d1e2d > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Filter subnet associations

< 1 >

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
☐	db-subnet	subnet-02c49c5462a752681	192.168.16.0/24	–	Main (rtb-02275d7800523728a / my-rt)
☑	web-subnet	subnet-046f804c3504b308c	192.168.0.0/20	–	rtb-0c1d9022c6d9d1e2d / my-rt-2

Selected subnets

subnet-046f804c3504b308c / web-subnet ✕

Cancel   **Save associations**

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aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC dashboard <

EC2 Global View ⎋

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Endpoints Updated

Endpoint services

Service networks Updated

Lattice services

Resource configurations New

Internet gateways (2) Info   Actions ▼   Create internet gateway

Q Search   < 1 >   ⚙

	Name	Internet gateway ID	State	VPC ID	Owner	
☐	Main-IGW	igw-0a7ded7c7809e3397	⊘ Attached	vpc-086acf965e03b88ed	main-VPC	943143228347	
☐	my-igw	igw-0185f819204067c74	⊘ Attached	vpc-048ac18cdb202b214	my-vpc	943143228347	

=

Select an internet gateway above

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VPC | ap-south-1   Instances | EC2 | ap-south   +

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#EditRoutes:RouteTableId=rtb-0c1d9022c6d9d1e2d

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Search   [Alt+S]   Asia Pacific (Mumbai) ▼   shreyashdemo ▼

EC2   VPC   Billing and Cost Manage...

VPC > Route tables > rtb-0c1d9022c6d9d1e2d > Edit routes

Edit routes

Destination	Target	Status	Propagated	
192.168.0.0/16	local ▼	⊘ Active	No	
	🔍 local ✕			
🔍 0.0.0.0/0 ✕	Internet Gateway ▼	⊘ Active	No	Remove
	🔍 igw-0185f819204067c74 ✕			

Add route

Cancel   Preview   Save changes

VPC | ap-south-1   Launch an instance | EC2

ap-south-1.console.aws.amazon.com/vpcconsole/home?region=ap-south-1#subnets:

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Search   [Alt+S]   Asia Pacific (Mumbai) ▾   shreyashdemo ▾

EC2   VPC   Billing and Cost Manage...

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EC2 Global View ↗

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Getting started Updated

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Lattice services

Resource configurations New

Resource gateways New

Target groups

▼ **DNS firewall**

⊘ **You have successfully changed subnet settings:**
  ◦ Enable auto-assign public IPv4 address   ✕

Subnets (1/5) Info   Last updated 4 minutes ago ⟳   Actions ▾   **Create subnet**

Find resources by attribute or tag   ‹ 1 › ⚙

	Name ▽	Subnet ID ▽	State ▽	VPC ▽	Block Public... ▽	IPv4 CIDR ▽	IPv6 CIDR ▽	IPv6 CIDR association ID ▽	Avail
☐	db-subnet	subnet-02c49c5462a752681	⊘ Available	vpc-048ac18cdb202b214	my-...	⊖ Off	192.168.16.0/24	–	–	251
☐	–	subnet-0d13bc377f21851cc	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.16.0/20	–	–	4091
☐	–	subnet-088dc469bd35b3774	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.32.0/20	–	–	4091
☑	web-subnet	subnet-046f804c3504b308c	⊘ Available	vpc-048ac18cdb202b214	my-...	⊖ Off	192.168.0.0/20	–	–	4091
☐	–	subnet-0015550bb08d693bc	⊘ Available	vpc-086acf965e03b88ed	main...	⊖ Off	172.31.0.0/20	–	–	4091

subnet-046f804c3504b308c / web-subnet

Details | Flow logs | **Route table** | Network ACL | CIDR reservations | Sharing | Tags

Route table: rtb-0c1d9022c6d9d1e2d / my-rt-2   Edit route table association

Routes (2)

Filter routes   ‹ 1 › ⚙

Destination ▽	Target ▽
192.168.0.0/16	local
0.0.0.0/0	igw-0185f819204067c74

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VPC | ap-south-1　×　　Launch an instance | EC2　×　+

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

gmail　　Console Home...　　YouTube　　ChatGPT　　　　　All Bookmarks

aws　　Q Search　[Alt+S]　　　　　　Asia Pacific (Mumbai) ▾　shreyashdemo ▾

EC2　VPC　Billing and Cost Manage...

EC2 > Instances > Launch an instance

▼ 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

demoaws　　　　　▼　　↻　Create new key pair

▼ Network settings　Info

VPC - required | Info

vpc-048ac18cdb202b214 (my-vpc)
192.168.0.0/16　　　　　　　▼　　↻

Subnet | Info

subnet-046f804c3504b308c　　　　　　　web-subnet
VPC: vpc-048ac18cdb202b214　Owner: 943143228347　Availability Zone: ap-south-1a
Zone type: Availability Zone　IP addresses available: 4091　CIDR: 192.168.0.0/20　▼　　↻　Create new subnet ⬈

Auto-assign public IP | Info

Enable　　　　　　　　▼

Additional charges apply when outside of free tier allowance

Firewall (security groups) | Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

◉ Create security group　　　　　○ Select existing security group

Security group name - required

launch-wizard-9

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#.@[]+=&;{}!$*

Description - required | Info

launch-wizard-9 created 2025-04-03T13:08:15.056Z

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)　　　　　　　　(Remove)

Type | Info

ssh　　　　　　　▼

Protocol | Info

TCP

Port range | Info

22

Source type | Info

Anywhere　　　　　▼

Source | Info

Q Add CIDR, prefix list or security group

Description - optional | Info

e.g. SSH for admin desktop

▼ Summary

Number of instances | Info

1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.7.2...read more
ami-002f6e91abff6eb96

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 of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.　✕

Cancel　　　　　　(Launch instance)

　　　　　Preview code

ec2-user@ip-192-168-11-208:~

```
[student@192 ~]$ scp -i ./Downloads/demoaws.pem ./Downloads/demoaws.pem ec2-user@15.206.172.2:.
demoaws.pem                                                                     100% 1678     7.4KB/s   00:00
[student@192 ~]$ scp -i ./Downloads/demoaws.pem ./Downloads/file.sh  ec2-user@15.206.172.2:.
file.sh                                                                         100%  493     6.3KB/s   00:00
[student@192 ~]$ ssh -i ./Downloads/demoaws.pem ec2-user@15.206.172.2
       ,       #_
     ~\_  ####_          Amazon Linux 2023
   ~~  \_#####\
   ~~     \###|
   ~~      \#/ ___       https://aws.amazon.com/linux/amazon-linux-2023
    ~~       V~' '->
     ~~~         /
       ~~._.   _/
         _/ _/
       _/m/'
Last login: Thu Apr  3 13:16:18 2025 from 106.195.12.9
[ec2-user@ip-192-168-11-208 ~]$ ls
demoaws.pem   file.sh
[ec2-user@ip-192-168-11-208 ~]$
```

```
[ec2-user@ip-192-168-11-208 ~]$ sudo dnf install nginx php mariadb105-server -y
Amazon Linux 2023 Kernel Livepatch repository                                                146 kB/s |  15 kB     00:00
Dependencies resolved.
========================================================================================================================
 Package                         Architecture          Version                              Repository              Size
========================================================================================================================
Installing:
 mariadb105-server               x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux             11 M
 nginx                           x86_64                1:1.26.3-1.amzn2023.0.1              amazonlinux             33 k
 php8.4                          x86_64                8.4.5-1.amzn2023.0.1                 amazonlinux             17 k
Installing dependencies:
 apr                             x86_64                1.7.5-1.amzn2023.0.4                 amazonlinux            129 k
 apr-util                        x86_64                1.6.3-1.amzn2023.0.1                 amazonlinux             98 k
 generic-logos-httpd             noarch                18.0.0-12.amzn2023.0.3               amazonlinux             19 k
 gperftools-libs                 x86_64                2.9.1-1.amzn2023.0.3                 amazonlinux            308 k
 httpd-core                      x86_64                2.4.62-1.amzn2023                    amazonlinux            1.4 M
 httpd-filesystem                noarch                2.4.62-1.amzn2023                    amazonlinux             14 k
 httpd-tools                     x86_64                2.4.62-1.amzn2023                    amazonlinux             81 k
 libbrotli                       x86_64                1.0.9-4.amzn2023.0.2                 amazonlinux            315 k
 libsodium                       x86_64                1.0.19-4.amzn2023                    amazonlinux            176 k
 libunwind                       x86_64                1.4.0-5.amzn2023.0.2                 amazonlinux             66 k
 libxslt                         x86_64                1.1.43-1.amzn2023.0.1                amazonlinux            183 k
 mailcap                         noarch                2.1.49-3.amzn2023.0.3                amazonlinux             33 k
 mariadb-connector-c             x86_64                3.3.10-1.amzn2023.0.1                amazonlinux            211 k
 mariadb-connector-c-config      noarch                3.3.10-1.amzn2023.0.1                amazonlinux            9.9 k
 mariadb105                      x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux            1.6 M
 mariadb105-common               x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux             29 k
 mariadb105-errmsg               x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux            213 k
 mysql-selinux                   noarch                1.0.4-2.amzn2023.0.3                 amazonlinux             36 k
 nginx-core                      x86_64                1:1.26.3-1.amzn2023.0.1              amazonlinux            670 k
 nginx-filesystem                noarch                1:1.26.3-1.amzn2023.0.1              amazonlinux            9.6 k
 nginx-mimetypes                 noarch                2.1.49-3.amzn2023.0.3                amazonlinux             21 k
 perl-B                          x86_64                1.80-477.amzn2023.0.6                amazonlinux            179 k
 perl-DBD-MariaDB                x86_64                1.22-1.amzn2023.0.4                  amazonlinux            153 k
 perl-DBI                        x86_64                1.643-7.amzn2023.0.3                 amazonlinux            700 k
 perl-Data-Dumper                x86_64                2.174-460.amzn2023.0.2               amazonlinux             55 k
 perl-File-Copy                  noarch                2.34-477.amzn2023.0.6                amazonlinux             20 k
 perl-FileHandle                 noarch                2.03-477.amzn2023.0.6                amazonlinux             16 k
 perl-Math-BigInt                noarch                1:1.9998.39-2.amzn2023.0.2           amazonlinux            202 k
 perl-Math-BigRat                noarch                0.2614-458.amzn2023.0.2              amazonlinux             39 k
 perl-Math-Complex               noarch                1.59-477.amzn2023.0.6                amazonlinux             47 k
 perl-Sys-Hostname               x86_64                1.23-477.amzn2023.0.6                amazonlinux             18 k
 perl-base                       noarch                2.27-477.amzn2023.0.6                amazonlinux             17 k
 php8.4-cli                      x86_64                8.4.5-1.amzn2023.0.1                 amazonlinux            3.8 M
 php8.4-common                   x86_64                8.4.5-1.amzn2023.0.1                 amazonlinux            797 k
 php8.4-process                  x86_64                8.4.5-1.amzn2023.0.1                 amazonlinux             53 k
 php8.4-xml                      x86_64                8.4.5-1.amzn2023.0.1                 amazonlinux            972 k
Installing weak dependencies:
 apr-util-openssl                x86_64                1.6.3-1.amzn2023.0.1                 amazonlinux             17 k
 httpd                           x86_64                2.4.62-1.amzn2023                    amazonlinux             48 k
 mariadb105-backup               x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux            6.3 M
 mariadb105-cracklib-password-check  x86_64            3:10.5.25-1.amzn2023.0.1             amazonlinux             15 k
 mariadb105-gssapi-server        x86_64                3:10.5.25-1.amzn2023.0.1             amazonlinux             17 k
```

ec2-user@ip-192-168-11-208:~

```
php8.4-pdo-8.4.5-1.amzn2023.0.1.x86_64                    php8.4-process-8.4.5-1.amzn2023.0.1.x86_64                    php8.4-sodium-8.4.5-1.amzn2023.0.1.x86_64
php8.4-xml-8.4.5-1.amzn2023.0.1.x86_64

Complete!
[ec2-user@ip-192-168-11-208 ~]$ sudo service nginx start
Redirecting to /bin/systemctl start nginx.service
[ec2-user@ip-192-168-11-208 ~]$ sudo systemclt enable nginx.service
sudo: systemclt: command not found
[ec2-user@ip-192-168-11-208 ~]$ sudo systemctl enable nginx.service
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx.service.
[ec2-user@ip-192-168-11-208 ~]$ sudo systemctl enable php-fpm.service
Created symlink /etc/systemd/system/multi-user.target.wants/php-fpm.service → /usr/lib/systemd/system/php-fpm.service.
[ec2-user@ip-192-168-11-208 ~]$ sudo service nginx status
Redirecting to /bin/systemctl status nginx.service
● nginx.service - The nginx HTTP and reverse proxy server
     Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: disabled)
    Drop-In: /usr/lib/systemd/system/nginx.service.d
             └─php-fpm.conf
     Active: active (running) since Thu 2025-04-03 13:19:25 UTC; 1min 34s ago
   Main PID: 23524 (nginx)
      Tasks: 2 (limit: 1111)
     Memory: 2.5M
        CPU: 61ms
     CGroup: /system.slice/nginx.service
             ├─23524 "nginx: master process /usr/sbin/nginx"
             └─23527 "nginx: worker process"

Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal systemd[1]: Starting nginx.service - The nginx HTTP and reverse proxy server...
Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal nginx[23417]: nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal nginx[23417]: nginx: configuration file /etc/nginx/nginx.conf test is successful
Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal systemd[1]: Started nginx.service - The nginx HTTP and reverse proxy server.
[ec2-user@ip-192-168-11-208 ~]$ sudo service php-fpm status
Redirecting to /bin/systemctl status php-fpm.service
● php-fpm.service - The PHP FastCGI Process Manager
     Loaded: loaded (/usr/lib/systemd/system/php-fpm.service; enabled; preset: disabled)
     Active: active (running) since Thu 2025-04-03 13:19:25 UTC; 1min 43s ago
   Main PID: 23414 (php-fpm)
     Status: "Processes active: 0, idle: 5, Requests: 0, slow: 0, Traffic: 0.00req/sec"
      Tasks: 6 (limit: 1111)
     Memory: 10.4M
        CPU: 57ms
     CGroup: /system.slice/php-fpm.service
             ├─23414 "php-fpm: master process (/etc/php-fpm.conf)"
             ├─23468 "php-fpm: pool www"
             ├─23469 "php-fpm: pool www"
             ├─23470 "php-fpm: pool www"
             ├─23471 "php-fpm: pool www"
             └─23472 "php-fpm: pool www"

Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal systemd[1]: Starting php-fpm.service - The PHP FastCGI Process Manager...
Apr 03 13:19:25 ip-192-168-11-208.ap-south-1.compute.internal systemd[1]: Started php-fpm.service - The PHP FastCGI Process Manager.
[ec2-user@ip-192-168-11-208 ~]$
```

ec2-user@ip-192-168-11-208:/usr/share/nginx/html

```
  GNU nano 8.3                                           form.html
<!DOCTYPE HTML>
<html>
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Stylish Form</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f4f4f4;
            display: flex;
            justify-content: center;
            align-items: center;
            height: 100vh;
            margin: 0;
        }
        .container {
            background: white;
            padding: 20px;
            border-radius: 8px;
            box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
            width: 350px;
        }
        h2 {
            text-align: center;
            color: #333;
        }
        label {
            font-weight: bold;
            display: block;
            margin-top: 10px;
        }
        input, textarea {
            width: 100%;
            padding: 8px;
            margin-top: 5px;
            border: 1px solid #ccc;
            border-radius: 5px;
            font-size: 14px;
        }
        input:focus, textarea:focus {
            border-color: #007BFF;
            outline: none;
        }
        .gender-group {
            display: flex;
            justify-content: space-between;
            margin-top: 10px;
```

[Read 95 lines]

```
^G Help        ^O Write Out   ^F Where Is    ^K Cut     ^T Execute   ^C Location   M-U Undo    M-A Set Mark   M-] To Bracket   M-B Previous   ◄ Back
^X Exit        ^R Read File   ^\ Replace     ^U Paste   ^J Justify   ^/ Go To Line  M-E Redo    M-6 Copy       ^B Where Was     M-F Next       ► Forward
```

ec2-user@ip-192-168-11-208:/usr/share/nginx/html

```
  GNU nano 8.3                                                    submit.php
<?php
// Database credentials
$servername = "database-1.ccjtp6srfafk.us-east-1.rds.amazonaws.com";
$username = "admin";
$password = "admin$123";
$dbname = "mydb";

// Create connection
$conn = mysqli_connect($servername, $username, $password, $dbname);

// Check connection
if (!$conn) {
    die("Connection failed: " . mysqli_connect_error());
}

// Validate form data
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $name = mysqli_real_escape_string($conn, $_POST["name"]);
    $email = mysqli_real_escape_string($conn, $_POST["email"]);
    $website = mysqli_real_escape_string($conn, $_POST["website"]);
    $comment = mysqli_real_escape_string($conn, $_POST["comment"]);
    $gender = mysqli_real_escape_string($conn, $_POST["gender"]);

    // Check if required fields are empty
    if (empty($name) || empty($email) || empty($gender)) {
        die("Error: Name, Email, and Gender are required fields.");
    }

    // Validate email format
    if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
        die("Error: Invalid email format.");
    }

    // Prepare SQL statement
    $sql = "INSERT INTO users (name, email, website, comment, gender) VALUES (?, ?, ?, ?, ?)";
    $stmt = mysqli_prepare($conn, $sql);

    if ($stmt) {
        mysqli_stmt_bind_param($stmt, "sssss", $name, $email, $website, $comment, $gender);
        if (mysqli_stmt_execute($stmt)) {
            echo "New record created successfully";
        } else {
            echo "Error: " . mysqli_stmt_error($stmt);
        }
        mysqli_stmt_close($stmt);
    } else {
        echo "Error: " . mysqli_error($conn);
    }
}
```

[Read 53 lines]

```
^G Help        ^O Write Out   ^F Where Is    ^K Cut      ^T Execute   ^C Location    M-U Undo    M-A Set Mark   M-] To Bracket   M-B Previous   ◀ Back
^X Exit        ^R Read File   ^\ Replace     ^U Paste    ^J Justify   ^/ Go To Line  M-E Redo    M-6 Copy       ^B Where Was     M-F Next       ▶ Forward
```

ec2-user@ip-192-168-11-208:/usr/share/nginx/html

```
[ec2-user@ip-192-168-11-208 html]$ sudo nano form.html
[ec2-user@ip-192-168-11-208 html]$ sudo service nginx reload
Redirecting to /bin/systemctl reload nginx.service
[ec2-user@ip-192-168-11-208 html]$ sudo nano submit.php
[ec2-user@ip-192-168-11-208 html]$ sudo service nginx reload
Redirecting to /bin/systemctl reload nginx.service
[ec2-user@ip-192-168-11-208 html]$ sudo yum install php-mysqlnd -y
Last metadata expiration check: 0:23:25 ago on Thu Apr  3 13:18:52 2025.
Dependencies resolved.
================================================================================
 Package            Architecture        Version                 Repository    Size
================================================================================
Installing:
 php8.4-mysqlnd                x86_64            8.4.5-1.amzn2023.0.1            amazonlinux          157 k

Transaction Summary
================================================================================
Install  1 Package

Total download size: 157 k
Installed size: 438 k
Downloading Packages:
php8.4-mysqlnd-8.4.5-1.amzn2023.0.1.x86_64.rpm            1.3 MB/s | 157 kB     00:00
--------------------------------------------------------------------------------
Total                                                    1.0 MB/s | 157 kB     00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                          1/1
  Installing       : php8.4-mysqlnd-8.4.5-1.amzn2023.0.1.x86_64               1/1
  Running scriptlet: php8.4-mysqlnd-8.4.5-1.amzn2023.0.1.x86_64               1/1
  Verifying        : php8.4-mysqlnd-8.4.5-1.amzn2023.0.1.x86_64               1/1

Installed:
  php8.4-mysqlnd-8.4.5-1.amzn2023.0.1.x86_64

Complete!
[ec2-user@ip-192-168-11-208 html]$
```

```
[ec2-user@ip-192-168-11-208 ~]$ sudo ssh -i demoaws.pem ec2-user@192.168.16.38
      ,       #_
   ~\_  ####_          Amazon Linux 2023
  ~~  \_#####\
  ~~      \###|
  ~~       \#/ ___     https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
        _/m/'
Last login: Thu Apr  3 14:01:39 2025 from 192.168.11.208
[ec2-user@ip-192-168-16-38 ~]$ sudo dnf install mariad105-server -y
Amazon Linux 2023 repository                                                                       61 MB/s |  35 MB     00:00
Amazon Linux 2023 Kernel Livepatch repository                                                    147 kB/s |  15 kB     00:00
No match for argument: mariad105-server
Error: Unable to find a match: mariad105-server
[ec2-user@ip-192-168-16-38 ~]$ sudo dnf install mariadb105-server -y
Last metadata expiration check: 0:00:18 ago on Thu Apr  3 14:02:43 2025.
Dependencies resolved.
================================================================================================================================
 Package                         Architecture        Version                            Repository              Size
================================================================================================================================
Installing:
 mariadb105-server               x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux             11 M
Installing dependencies:
 mariadb-connector-c             x86_64              3.3.10-1.amzn2023.0.1              amazonlinux            211 k
 mariadb-connector-c-config      noarch              3.3.10-1.amzn2023.0.1              amazonlinux            9.9 k
 mariadb105                      x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux            1.6 M
 mariadb105-common               x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux             29 k
 mariadb105-errmsg               x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux            213 k
 mysql-selinux                   noarch              1.0.4-2.amzn2023.0.3               amazonlinux             36 k
 perl-B                          x86_64              1.80-477.amzn2023.0.6              amazonlinux            179 k
 perl-DBD-MariaDB                x86_64              1.22-1.amzn2023.0.4                amazonlinux            153 k
 perl-DBI                        x86_64              1.643-7.amzn2023.0.3               amazonlinux            700 k
 perl-Data-Dumper                x86_64              2.174-460.amzn2023.0.2             amazonlinux             55 k
 perl-File-Copy                  noarch              2.34-477.amzn2023.0.6              amazonlinux             20 k
 perl-FileHandle                 noarch              2.03-477.amzn2023.0.6              amazonlinux             16 k
 perl-Math-BigInt                noarch              1:1.9998.39-2.amzn2023.0.2         amazonlinux            202 k
 perl-Math-BigRat                noarch              0.2614-458.amzn2023.0.2            amazonlinux             39 k
 perl-Math-Complex               noarch              1.59-477.amzn2023.0.6              amazonlinux             47 k
 perl-Sys-Hostname               x86_64              1.23-477.amzn2023.0.6              amazonlinux             18 k
 perl-base                       noarch              2.27-477.amzn2023.0.6              amazonlinux             17 k
Installing weak dependencies:
 mariadb105-backup               x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux            6.3 M
 mariadb105-cracklib-password-check  x86_64          3:10.5.25-1.amzn2023.0.1           amazonlinux             15 k
 mariadb105-gssapi-server        x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux             17 k
 mariadb105-server-utils         x86_64              3:10.5.25-1.amzn2023.0.1           amazonlinux            216 k

Transaction Summary
================================================================================================================================
Install  22 Packages
```

VPC Console   ModifyInboundSecurityG   +

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-03791c6841c6b04b6

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

aws   Q Search   [Alt+S]   Asia Pacific (Mumbai) ▾   shreyashdemo ▾

EC2   VPC   Billing and Cost Manage...

EC2 > Security Groups > sg-03791c6841c6b04b6 - launch-wizard-10 > Edit inbound rules

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info		Description - optional Info	
sgr-01a5162600a7704ad	SSH ▾	TCP	22	Custom ▾	Q 0.0.0.0/0 ✕		Delete
sgr-0a665e3d8b5798cf3	HTTP ▾	TCP	80	Custom ▾	Q 0.0.0.0/0 ✕		Delete
–	Custom TCP ▾	TCP	3306	Custom ▾	Q sg-0dd85d15a890d151b ✕ sg-0dd85d15a890d151b ✕		Delete

Add rule

⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.   ✕
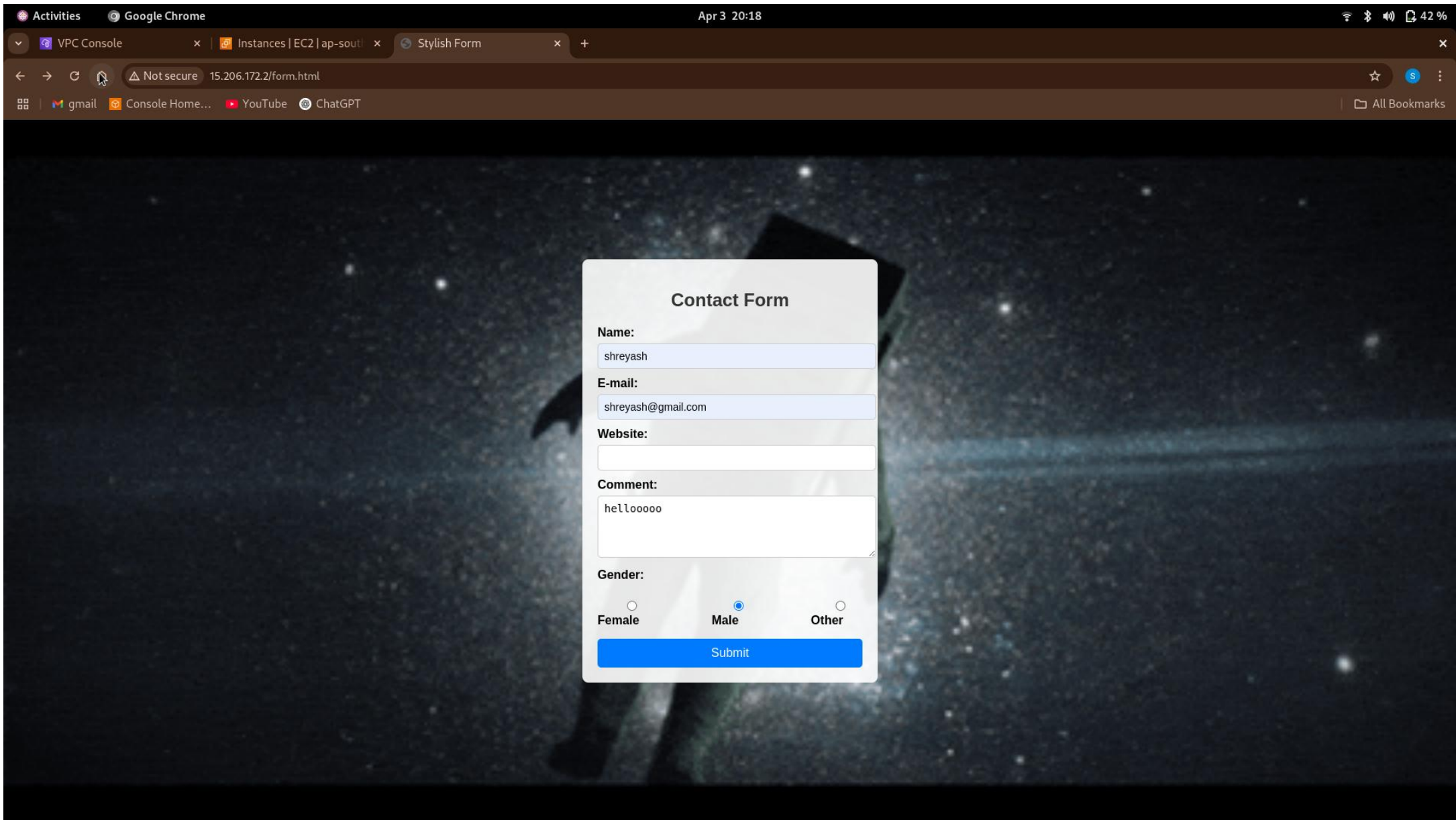
Cancel   Preview changes   Save rules

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> create user 'shreyash'@'192.168.11.208' identified by 'Pass@123';
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> ^C
;
;
ERROR: No query specified

MariaDB [(none)]> alter user 'root'@'localhost identified' by 'Pass@123';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'by 'Pass@123'' at line 1
MariaDB [(none)]> alter user 'root'@'localhost identified by 'Pass@123';
    '> ;
    '> ^C
;
;
    '> ';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'Pass@123';
;
'' at line 1
MariaDB [(none)]> alter user 'root'@'localhost' identified by 'Pass@123';
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> create database mydb;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> grant all privileges on mydb.* to 'shreyash'@'92.168.11.208';
ERROR 1133 (28000): Can't find any matching row in the user table
MariaDB [(none)]> grant all privileges on mydb.* to 'shreyash'@'92.168.11.208';
ERROR 1133 (28000): Can't find any matching row in the user table
MariaDB [(none)]> CREATE USER 'shreyash'@'92.168.11.208' IDENTIFIED BY 'your_password';
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> grant all privileges on mydb.* to 'shreyash'@'92.168.11.208';
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> CREATE USER 'shreyash'@'192.168.11.208' IDENTIFIED BY 'Pass@123';
ERROR 1396 (HY000): Operation CREATE USER failed for 'shreyash'@'192.168.11.208'
MariaDB [(none)]> grant all privileges on mydb.* to 'shreyash'@'192.168.11.208';
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> create table student(id int primary key auto_increment, name varchar(100), email varchar(100), website varchar(100), comment varchar(100), gender varchar(100));
ERROR 1046 (3D000): No database selected
MariaDB [(none)]> use mydb;
Database changed
MariaDB [mydb]> create table student(id int primary key auto_increment, name varchar(100), email varchar(100), website varchar(100), comment varchar(100), gender varchar(100));
Query OK, 0 rows affected (0.011 sec)

MariaDB [mydb]> █
```

VPC Console   Instances | EC2 | ap-sout   Stylish Form

Not secure   15.206.172.2/form.html

gmail   Console Home...   YouTube   ChatGPT   All Bookmarks

Contact Form

Name:

shreyash

E-mail:

shreyash@gmail.com

Website:

Comment:

hellooooo

Gender:

○   ●   ○
Female   Male   Other

Submit

New record created successfully

ec2-user@ip-192-168-11-208:~

```
[ec2-user@ip-192-168-11-208 ~]$ sudo mysql -u shreyash -p -h192.168.16.38
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 7
Server version: 10.5.25-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show database;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'database' at line 1
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mydb               |
+--------------------+
2 rows in set (0.001 sec)

MariaDB [(none)]> use mydb;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [mydb]> select * from student;
+----+----------+--------------------+---------+-----------+--------+
| id | name     | email              | website | comment   | gender |
+----+----------+--------------------+---------+-----------+--------+
|  1 | shreyash | shreyash@gmail.com |         | hellooooo | male   |
|  2 | shreyash | shreyash@gmail.com |         | hellooooo | male   |
|  3 | rohit    | shreyash@gmail.com |         | hellooooo | male   |
+----+----------+--------------------+---------+-----------+--------+
3 rows in set (0.001 sec)

MariaDB [mydb]>
```