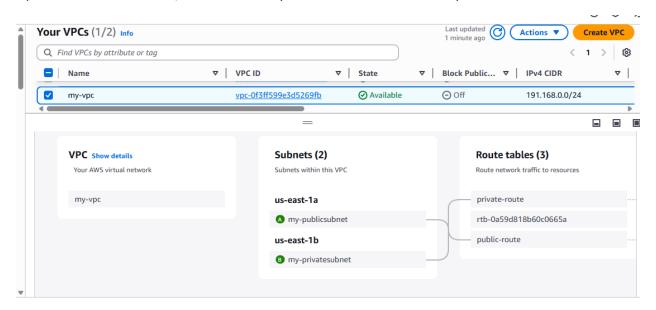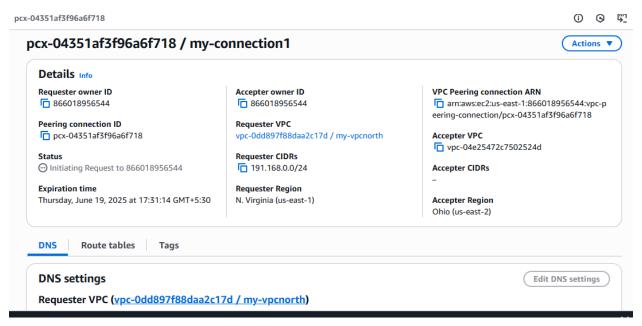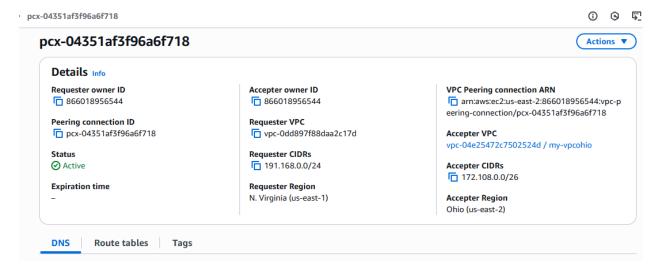1) Create one VPC ,with 1 one public subnet and 1 private subnet.
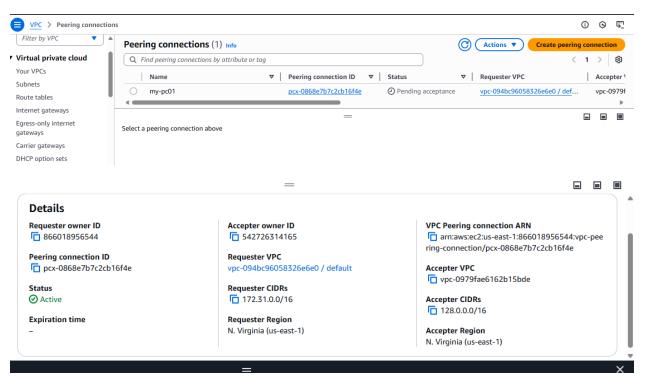

2) Enable VPC peering for cross region.

pcx-04351af3f96a6f718
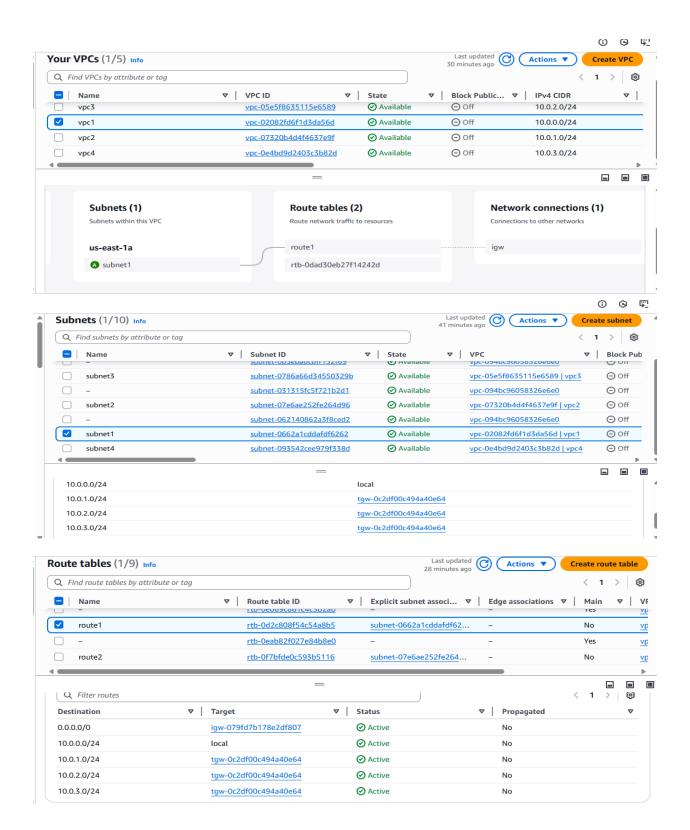
Actions ▼

Details Info

Requester owner ID
866018956544

Peering connection ID
pcx-04351af3f96a6f718

Status
⊘ Active

Expiration time
–

Accepter owner ID
866018956544

Requester VPC
vpc-0dd897f88daa2c17d

Requester CIDRs
191.168.0.0/24

Requester Region
N. Virginia (us-east-1)

VPC Peering connection ARN
arn:aws:ec2:us-east-2:866018956544:vpc-peering-connection/pcx-04351af3f96a6f718

Accepter VPC
vpc-04e25472c7502524d / my-vpcohio

Accepter CIDRs
172.108.0.0/26

Accepter Region
Ohio (us-east-2)

DNS   **Route tables**   **Tags**

3) Enable VPC peering for cross account. (You can collaborate with your friend and do this task).

VPC > Peering connections

Peering connections (1) Info

Find peering connections by attribute or tag

Actions ▼   **Create peering connection**

Name	Peering connection ID	Status	Requester VPC	Accepter
my-pc01	pcx-0868e7b7c2cb16f4e	⏱ Pending acceptance	vpc-094bc96058326e6e0 / def...	vpc-0979f

Select a peering connection above

Details

Requester owner ID
866018956544

Peering connection ID
pcx-0868e7b7c2cb16f4e

Status
⊘ Active

Expiration time
–

Accepter owner ID
542726314165

Requester VPC
vpc-094bc96058326e6e0 / default

Requester CIDRs
172.31.0.0/16

Requester Region
N. Virginia (us-east-1)

VPC Peering connection ARN
arn:aws:ec2:us-east-1:866018956544:vpc-peering-connection/pcx-0868e7b7c2cb16f4e

Accepter VPC
vpc-0979fae6162b15bde

Accepter CIDRs
128.0.0.0/16

Accepter Region
N. Virginia (us-east-1)

4) Setup VPC Transit gateway.

Your VPCs (1/5) Info

Last updated
30 minutes ago

Actions ▼   Create VPC

🔍 Find VPCs by attribute or tag

‹ 1 › ⚙

☐	Name	▽	VPC ID	▽	State	▽	Block Public...	▽	IPv4 CIDR	▽
☐	vpc3		vpc-05e5f8635115e6589		⊘ Available		⊖ Off		10.0.2.0/24	
☑	vpc1		vpc-02082fd6f1d3da56d		⊘ Available		⊖ Off		10.0.0.0/24	
☐	vpc2		vpc-07320b4d4f4637e9f		⊘ Available		⊖ Off		10.0.1.0/24	
☐	vpc4		vpc-0e4bd9d2403c3b82d		⊘ Available		⊖ Off		10.0.3.0/24	

Subnets (1)
Subnets within this VPC

us-east-1a

🅐 subnet1

Route tables (2)
Route network traffic to resources

route1

rtb-0dad30eb27f14242d

Network connections (1)
Connections to other networks

igw

Subnets (1/10) Info

Last updated
41 minutes ago

Actions ▼   Create subnet

🔍 Find subnets by attribute or tag

‹ 1 › ⚙

☐	Name	▽	Subnet ID	▽	State	▽	VPC	Block Pub
☐	–		subnet-0b3ebad0bf132f69		⊘ Available		vpc-094bc96058326e6e0	⊖ Off
☐	subnet3		subnet-0786a66d34550329b		⊘ Available		vpc-05e5f8635115e6589 | vpc3	⊖ Off
☐	–		subnet-031315fc5f721b2d1		⊘ Available		vpc-094bc96058326e6e0	⊖ Off
☐	subnet2		subnet-07e6ae252fe264d96		⊘ Available		vpc-07320b4d4f4637e9f | vpc2	⊖ Off
☐	–		subnet-062140862a3f8ced2		⊘ Available		vpc-094bc96058326e6e0	⊖ Off
☑	subnet1		subnet-0662a1cddafdf6262		⊘ Available		vpc-02082fd6f1d3da56d | vpc1	⊖ Off
☐	subnet4		subnet-093542cee979f338d		⊘ Available		vpc-0e4bd9d2403c3b82d | vpc4	⊖ Off

10.0.0.0/24	local
10.0.1.0/24	tgw-0c2df00c494a40e64
10.0.2.0/24	tgw-0c2df00c494a40e64
10.0.3.0/24	tgw-0c2df00c494a40e64

Route tables (1/9) Info

Last updated
28 minutes ago

Actions ▼   Create route table

🔍 Find route tables by attribute or tag

‹ 1 › ⚙

☐	Name	▽	Route table ID	▽	Explicit subnet associ...	▽	Edge associations	▽	Main	▽	VF
☐	–		rtb-0e069c861t4c3b2a0				–		Yes		vp
☑	route1		rtb-0d2c808f54c54a8b5		subnet-0662a1cddafdf62...		–		No		vp
☐	–		rtb-0eab82f027e84b8e0		–		–		Yes		vp
☐	route2		rtb-0f7bfde0c593b5116		subnet-07e6ae252fe264...		–		No		vp

🔍 Filter routes

‹ 1 › ⚙

Destination	▽	Target	▽	Status	▽	Propagated	▽
0.0.0.0/0		igw-079fd7b178e2df807		⊘ Active		No	
10.0.0.0/24		local		⊘ Active		No	
10.0.1.0/24		tgw-0c2df00c494a40e64		⊘ Active		No	
10.0.2.0/24		tgw-0c2df00c494a40e64		⊘ Active		No	
10.0.3.0/24		tgw-0c2df00c494a40e64		⊘ Active		No	

Transit gateways (1/1) info

↻ (Actions ▾)   **Create transit gateway**

🔍 Find transit gateway by attribute or tag   ‹ 1 › ⚙

☑	Name ✎	▽	Transit gateway ID	▽	State	▽
☑	transit		tgw-0c2df00c494a40e64		⊘ Available	

Transit gateway: tgw-0c2df00c494a40e64 / transit   ⚙ ⌄

Transit gateway ID	Transit gateway ARN	Owner ID	Description
⧉ tgw-0c2df00c494a40e64	⧉ arn:aws:ec2:us-east-1:8660189 56544:transit-gateway/tgw-0c2df0 0c494a40e64	⧉ 866018956544	–

State	Default association route table	Default propagation route table	Transit gateway CIDR blocks
⊘ Available	Enable	Enable	1 CIDRs

Transit gateway attachments (4) info

↻ (Actions ▾)   **Create transit gateway attachment**

🔍 Find transit gateway attachment by attribute or tag   ‹ 1 › ⚙

☐	Name ✎	▽	Transit gateway attachment ID	▽	Transit gateway ID	▽	State	▽	Resourc...	▽	Re
☐	transitattach2		tgw-attach-0413ca9b1504e4e99		tgw-0c2df00c494a40e64		⊘ Available		VPC		vp
☐	transitattach1		tgw-attach-045de582d8a8dca4c		tgw-0c2df00c494a40e64		⊘ Available		VPC		vp
☐	transitattach4		tgw-attach-0577ebf73eeb58f34		tgw-0c2df00c494a40e64		⊘ Available		VPC		vp
☐	transitattach3		tgw-attach-0e381a847f21c8ddb		tgw-0c2df00c494a40e64		⊘ Available		VPC		vp

Select a transit gateway attachment   ⚙ ⌄

Instances (6) Info

↻ (Connect) (Instance state ▾) (Actions ▾)   **Launch instances** ▾

🔍 Find Instance by attribute or tag (case-sensitive)   (All states ▾)   ‹ 1 › ⚙

☐	Name ✎	▽	Instance ID	Instance state	▽	Instance type	▽	Status check	Alarm status	Availability
☐	instance2		i-0739088837ca59471	⊘ Running		t2.micro		⊘ 2/2 checks passec	View alarms ➕	us-east-1b
☐	instance3		i-02cb5589a75353770	⊘ Running		t2.micro		⊘ 2/2 checks passec	View alarms ➕	us-east-1c
☐	ubuntu nginx		i-0fa186bb4902cb251	⊖ Stopped		t2.micro		–	View alarms ➕	us-east-1a
☐	Instance_sush...		i-0c8c807b27affc7a2	⊖ Stopped		t2.micro		–	View alarms ➕	us-east-1a
☐	instance1		i-095e05281e6fefea5	⊘ Running		t2.micro		⊘ 2/2 checks passec	View alarms ➕	us-east-1a
☐	instance4		i-0a36441746dde249f	⊘ Running		t2.micro		⊘ 2/2 checks passec	View alarms ➕	us-east-1d

Select an instance   ⚙ ⌄

```
PC@DESKTOP-8IMOQCN MINGW64 ~/Downloads
$ ssh -i "sushma.pem" ec2-user@44.211.64.1
The authenticity of host '44.211.64.1 (44.211.64.1)' can't be established.
ED25519 key fingerprint is SHA256:dQ4PRbkAFswNVV4Jxq4HQbJSgZYobbLxjjutLX9GcHk.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '44.211.64.1' (ED25519) to the list of known hosts.
       #_
  ~\_  ####_          Amazon Linux 2
 ~~  \_#####\
  ~~     \###|         AL2 End of Life is 2026-06-30.
  ~~      \#/ ___
   ~~      V~' '->
    ~~~         /      A newer version of Amazon Linux is available!
     ~~._.   _/
        _/ _/          Amazon Linux 2023, GA and supported until 2028-03-15.
      _/m/'                 https://aws.amazon.com/linux/amazon-linux-2023/
```

```
         _/m/              https://aws.amazon.com/linux/amazon-linux-2023/
[ec2-user@ip-10-0-1-10 ~]$ ping 10.0.2.8
PING 10.0.2.8 (10.0.2.8) 56(84) bytes of data.
64 bytes from 10.0.2.8: icmp_seq=1 ttl=254 time=3.10 ms
64 bytes from 10.0.2.8: icmp_seq=2 ttl=254 time=1.63 ms
64 bytes from 10.0.2.8: icmp_seq=3 ttl=254 time=1.60 ms
64 bytes from 10.0.2.8: icmp_seq=4 ttl=254 time=1.64 ms
64 bytes from 10.0.2.8: icmp_seq=5 ttl=254 time=1.61 ms
64 bytes from 10.0.2.8: icmp_seq=6 ttl=254 time=1.58 ms
64 bytes from 10.0.2.8: icmp_seq=7 ttl=254 time=1.62 ms
64 bytes from 10.0.2.8: icmp_seq=8 ttl=254 time=1.64 ms
64 bytes from 10.0.2.8: icmp_seq=9 ttl=254 time=1.52 ms
64 bytes from 10.0.2.8: icmp_seq=10 ttl=254 time=1.62 ms
64 bytes from 10.0.2.8: icmp_seq=11 ttl=254 time=1.78 ms
^C
--- 10.0.2.8 ping statistics ---
11 packets transmitted, 11 received, 0% packet loss, time 10016ms
rtt min/avg/max/mdev = 1.523/1.760/3.100/0.431 ms
[ec2-user@ip-10-0-1-10 ~]$ ping 10.0.3.9
PING 10.0.3.9 (10.0.3.9) 56(84) bytes of data.
64 bytes from 10.0.3.9: icmp_seq=1 ttl=254 time=2.48 ms
64 bytes from 10.0.3.9: icmp_seq=2 ttl=254 time=3.88 ms
64 bytes from 10.0.3.9: icmp_seq=3 ttl=254 time=1.18 ms
^C
--- 10.0.3.9 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 1.186/2.518/3.886/1.104 ms
[ec2-user@ip-10-0-1-10 ~]$ ping 10.0.1.10
PING 10.0.1.10 (10.0.1.10) 56(84) bytes of data.
64 bytes from 10.0.1.10: icmp_seq=1 ttl=255 time=0.024 ms
64 bytes from 10.0.1.10: icmp_seq=2 ttl=255 time=0.032 ms
64 bytes from 10.0.1.10: icmp_seq=3 ttl=255 time=0.031 ms
64 bytes from 10.0.1.10: icmp_seq=4 ttl=255 time=0.031 ms
64 bytes from 10.0.1.10: icmp_seq=5 ttl=255 time=0.031 ms
64 bytes from 10.0.1.10: icmp_seq=6 ttl=255 time=0.034 ms
64 bytes from 10.0.1.10: icmp_seq=7 ttl=255 time=0.045 ms
64 bytes from 10.0.1.10: icmp_seq=8 ttl=255 time=0.033 ms
64 bytes from 10.0.1.10: icmp_seq=9 ttl=255 time=0.034 ms
64 bytes from 10.0.1.10: icmp_seq=10 ttl=255 time=0.035 ms
64 bytes from 10.0.1.10: icmp_seq=11 ttl=255 time=0.043 ms
64 bytes from 10.0.1.10: icmp_seq=12 ttl=255 time=0.035 ms
^C
--- 10.0.1.10 ping statistics ---
12 packets transmitted, 12 received, 0% packet loss, time 11258ms
rtt min/avg/max/mdev = 0.024/0.034/0.045/0.005 ms
```

5) Setup VPC End Point.

Instances (2) Info

Last updated
6 minutes ago

Connect | Instance state ▼ | Actions ▼ | **Launch instances** ▼

🔍 Find Instance by attribute or tag (case-sensitive)

All states ▼

‹ 1 › ⚙

☐	Name ✎ ▽	Instance ID	Instance state ▽	Instance type ▽	Status check	Alarm status	Availability
☐	instance2	i-0aad870d8856e2ff0	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passec	View alarms ＋	us-east-1b
☐	instance1	i-034aba963ad11d375	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passec	View alarms ＋	us-east-1a

◄ ► ▶

Select an instance

⚙ ⌄

ⓘ 🕐 🖥

Your VPCs (1/1) Info

Last updated
6 minutes ago

Actions ▼ | **Create VPC**

🔍 Find VPCs by attribute or tag

‹ 1 › ⚙

☑	Name ▽	VPC ID ▽	State ▽	Block Public... ▽	IPv4 CIDR ▽	IF
☑	default	vpc-094bc96058326e6e0	⊘ Available	⊖ Off	172.31.0.0/16	–

◄ ►

═

🖵 🖵 🖵

Subnets within this VPC	Route network traffic to resources	Connections to other networks
us-east-1a		
Ⓐ public-subnet1	private-route	igw-0b56a9e867349f747
Ⓐ subnet-0a775cc7ececb63a2	public-route	s3-endpoint
us-east-1b	rtb-05dec867bccf1d6fc	
Ⓑ subnet-0f4a0eb2cc753ed63		
Ⓑ private-subnet		
us-east-1c		

```
PC@DESKTOP-8IMOQCN MINGW64 ~/Downloads
$ ssh -i "sushma.pem" ec2-user@ec2-34-227-109-228.compute-1.amazonaws.com
The authenticity of host 'ec2-34-227-109-228.compute-1.amazonaws.com (34.227.109.228)' can't be established.
ED25519 key fingerprint is SHA256:Uzj3p+pf/cOLJ/WBtebvXhlFUwYV6Uvs/aP3MuNKsCY.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-34-227-109-228.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
       #_
   '\_  ####_            Amazon Linux 2
  ~~  \_#####\
  ~~      \###|          AL2 End of Life is 2026-06-30.
  ~~       \#/ ___
   ~~       V~' '->
    ~~~         /        A newer version of Amazon Linux is available!
     ~~._.   _/
        _/ _/            Amazon Linux 2023, GA and supported until 2028-03-15.
      _/m/'               https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-172-31-109-196 ~]$ sudo su
[root@ip-172-31-109-196 ec2-user]# clear
[root@ip-172-31-109-196 ec2-user]# aws --version
aws-cli/1.18.147 Python/2.7.18 Linux/5.10.237-230.949.amzn2.x86_64 botocore/1.18
.6
[root@ip-172-31-109-196 ec2-user]# aws s3 ls
Unable to locate credentials. You can configure credentials by running "aws conf
igure".
[root@ip-172-31-109-196 ec2-user]# aws configure
AWS Access Key ID [None]: AKIA4TIWASUAIWHBJHYG
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
[root@ip-172-31-109-196 ec2-user]# aws s3 ls
2025-06-10 13:58:15 my-bucket-06111998
[root@ip-172-31-109-196 ec2-user]# find / -name proile
[root@ip-172-31-109-196 ec2-user]# find / -name profile
/etc/profile
/etc/lvm/profile
[root@ip-172-31-109-196 ec2-user]# ls
```

```
[root@ip-172-31-109-196 .aws]# ssh -i test.pem ec2-user@172.31.142.117
The authenticity of host '172.31.142.117 (172.31.142.117)' can't be established.
ECDSA key fingerprint is SHA256:XXEkmcXcgJV2so4cmj6dHOQIS98NwpGqMn1lxGWI4+g.
ECDSA key fingerprint is MD5:c0:82:2f:23:28:f3:a3:ab:e3:d5:58:55:91:e4:0d:df.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '172.31.142.117' (ECDSA) to the list of known hosts.
    '      #_
   ~\_  ####_            Amazon Linux 2023
  ~~  \_#####\
  ~~      \###|
  ~~       \#/ ___       https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
     ~~._.   _/
        _/ _/
      _/m/'
[ec2-user@ip-172-31-142-117 ~]$ sudo so
sudo: so: command not found
[ec2-user@ip-172-31-142-117 ~]$ sudo su ~
su: user /home/ec2-user does not exist or the user entry does not contain all th
e required fields
[ec2-user@ip-172-31-142-117 ~]$ sudo su
[root@ip-172-31-142-117 ec2-user]# aws s3 ls

Unable to locate credentials. You can configure credentials by running "aws conf
igure".
[root@ip-172-31-142-117 ec2-user]# aws config

usage: aws [options] <command> <subcommand> [<subcommand> ...] [parameters]
To see help text, you can run:
```

```
[root@ip-172-31-142-117 ec2-user]# aws configure
AWS Access Key ID [None]: AKIA4TIWASUAIWHBJHYG
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
[root@ip-172-31-142-117 ec2-user]# aws s3 ls

Connect timeout on endpoint URL: "https://s3.us-east-1.amazonaws.com/"
[root@ip-172-31-142-117 ec2-user]#
[root@ip-172-31-142-117 ec2-user]# x^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# cccccccccccc^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# ^C
[root@ip-172-31-142-117 ec2-user]# cccccccccccccccccccc
bash: cccccccccccccccccccc: command not found
[root@ip-172-31-142-117 ec2-user]#
[root@ip-172-31-142-117 ec2-user]#
[root@ip-172-31-142-117 ec2-user]#
[root@ip-172-31-142-117 ec2-user]# /'.;.accx^C
[root@ip-172-31-142-117 ec2-user]# aws s3 ls
2025-06-10 13:58:15 my-bucket-06111998
```