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2KE20CS032

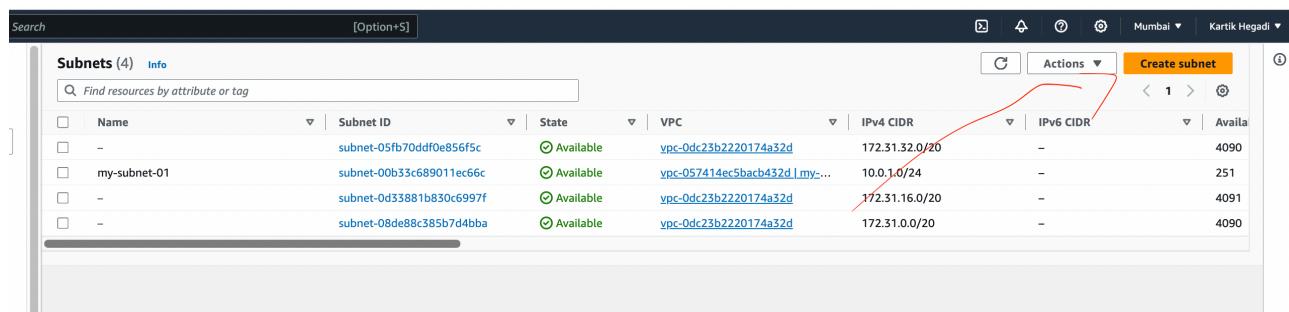
Assignment 33

Understood. To follow the provided instructions and create the files/directory using the same name and case as provided in the task steps, please provide me with the specific names and case instructions for the files/directory you want to create.

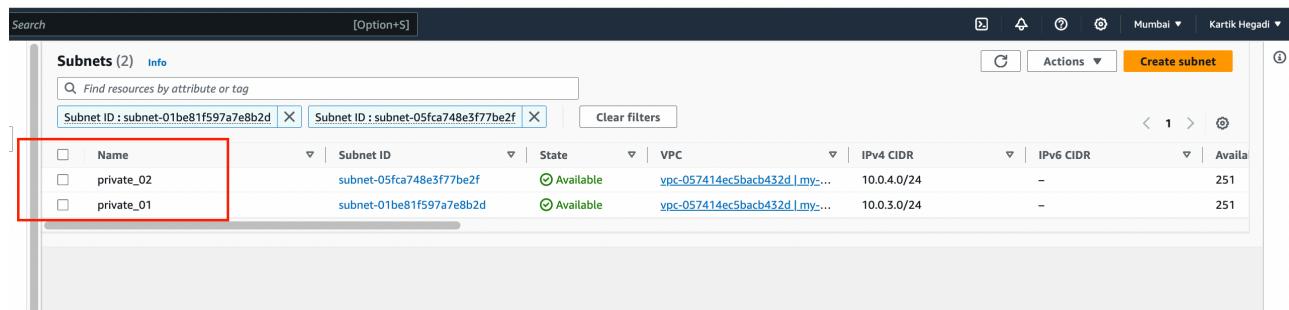
AWS-2

Assignment - 2 -Configure EC2 private Instance in AWS (create two private subnets ,two private instances, 1 Route Tables)

1. Login to your AWS console and choose the region where you have created your VPC
2. Click on "Create subnet" select the VPC that you have created previously



Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available
-	subnet-05fb70ddf0e856f5c	Available	vpc-0dc23b2220174a32d	172.31.32.0/20	-	4090
my-subnet-01	subnet-00b33c689011ec66c	Available	vpc-057414ec5bacb432d my...	10.0.1.0/24	-	251
-	subnet-0d33881b830c6997f	Available	vpc-0dc23b2220174a32d	172.31.16.0/20	-	4091
-	subnet-08de88c385b7d4bba	Available	vpc-0dc23b2220174a32d	172.31.0.0/20	-	4090



Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available
private_02	subnet-05fca748e3f77be2f	Available	vpc-057414ec5bacb432d my...	10.0.4.0/24	-	251
private_01	subnet-01be81f597a7e8b2d	Available	vpc-057414ec5bacb432d my...	10.0.3.0/24	-	251

3. In the subnet settings(subnet 1 of 1) , provide the name of the subnet ex: private_01 ,select the AZ that you have given for public instance, provide the IPV4

CIDR block as 10.0.3.0/24 (Note : you can provide your own CIDR block)

4. Click on Add new subnet and provide the name of the subnet ex: private_02
select the AZ select the AZ that you have given for public instance provide the IPV4
CIDR block as 10.0.4.0/24 (Note : you can provide your own CIDR block)

5. Now click on "create subnet" to get created

Subnet 1 of 2

Subnet name

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

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.



IPv4 CIDR block [Info](#)

10.0.3.0/24

▼ Tags - optional

Key

Value - optional



You can add 49 more tags.

Subnet 2 of 2

Subnet name

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

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.



IPv4 CIDR block [Info](#)

10.0.4.0/24

▼ Tags - optional

Key

Value - optional



You can add 49 more tags.

6. Create a Route table private subnets

Rout table for 1st

Your VPCs [New](#)

Subnets

Route tables 1

- Internet gateways
- Egress-only internet gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections

▼ Security

- Network ACLs
- Security groups

▼ DNS firewall

- Rule groups
- Domain lists

▼ Network Firewall

- Firewalls

Name	Route ID	Description	State	Last modified	Owner	Region
private_rt	rtb-040ea9caf07f4a886	-	-	No	vpa-057414ec5bacb432d my...	280005775301

rtb-040ea9caf07f4a886 / private_rt 3

Details | Routes | **Subnet associations** 3 | Edge associations | Route propagation | Tags

Explicit subnet associations (0)

4

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
No subnet associations.				
You do not have any subnet associations.				

8. Now create instances for private subnets, navigate to EC2 and click on Launch

Instance

VPC > Route tables > rtb-040ea9caf07f4a886 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/3)

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	my-subnet-01	subnet-00b33c689011ec66c	10.0.1.0/24	-	rtb-06d5016a6dad9350d / public_rt
<input type="checkbox"/>	private_02	subnet-05fca748e5f7be2f	10.0.4.0/24	-	Main (rtb-0a446091bb5a6ff66)
<input checked="" type="checkbox"/>	private_01	subnet-01be81f597a7e8b2d	10.0.3.0/24	-	Main (rtb-0a446091bb5a6ff66)

Selected subnets

subnet-01be81f597a7e8b2d / private_01	X
---------------------------------------	---

1 2

Cancel Save associations

9. Select the AMI as below

▼ 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 our full catalog including 1000s of application and OS images

Quick Start

 [Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI ami-06791f9213ccb608b (64-bit (x86)) / ami-0ee08895e8a84a697 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs Free tier eligible

Description
Amazon Linux 2023 AMI 2023.2.20231018.2 x86_64 HVM kernel-6.1

Architecture 64-bit (x86) **AMI ID** ami-06791f9213ccb608b **Verified provider**

10. Click "Next" in the step2 as default is selected

11. In the Network, select the VPC that you have created, in the subnets select the private 01 subnet that you have created. Click on "Next : Add Storage"

12. In storage the default options are selected , you can click "Next : Add Tags" provide the Name and Value as below, (it is your choice to provide any values) and click on 'configure security groups'

13. In 'configure security groups' add the following rules
(Note : Select my ip from the source)

14. Click on Launch in the Last step, it will be selecting the existing keypair by

default, make a check on acknowledge and click launch instance

Your private Instance is created as below

15. Similarly create another private Instance

11. In the Network, select the VPC that you have created, in the subnets select the private 01 subnet that you have created. Click on "Next : Add Storage"

12. In storage the default options are selected , you can click "Next : Add Tags" provide the Name and Value as below, (it is your choice to provide any values) and click on 'configure security groups

▼ Network settings [Info](#)

VPC - required [Info](#)
vpc-057414ec5bacb432d (my-vpc-01)
10.0.0.0/16 [G](#)

Subnet Info
subnet-01be81f597a7e8b2d private_01
VPC: vpc-057414ec5bacb432d Owner: 280005775301
Availability Zone: ap-south-1a IP addresses available: 251 CIDR: 10.0.3.0/24) [C](#) Create new subnet [Z](#)

Auto-assign public IP [Info](#)
Disable [▼](#)

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-4

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-4 created 2023-10-28T13:00:18.011Z

Inbound Security Group Rules

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

Type Info	Protocol Info	Port range Info
ssh ▼	TCP	22
Source type Info	Source Info	Description - optional Info
Anywhere ▼	<input type="text"/> Add CIDR, prefix list or security 0.0.0.0/0 X	e.g. SSH for admin desktop

Route tables (5) Info					
<input type="checkbox"/>	Name	Route table ID	Explicit subnet associations	Edge associations	
<input type="checkbox"/>	-	rtb-0a446091bb5a6ff66	-	-	
<input type="checkbox"/>	-	rtb-08220544a6d57ceb6	-	-	
<input type="checkbox"/>	private_rt_1	rtb-040ea9caf07f4a886	subnet-01be81f597a7e8...	-	
<input type="checkbox"/>	public_rt	rtb-06d5016a6dad9350d	subnet-00b33c689011ec...	-	
<input type="checkbox"/>	private_rt_2	rtb-0d122ea89b0b7d536	-	-	

Subnets

Route tables [Edit](#) [Details](#) [Logs](#) [Metrics](#) [Actions](#)

<input checked="" type="checkbox"/> private_rt_2	rtb-0d122ea89b0b7d536	-	-	No	ypc-057414ec5bach432d my...	280005775301
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Details Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (0)

[Edit subnet associations](#)

No subnet associations

You do not have any subnet associations.

- Subnets
- Internet gateways
- Egress-only internet gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections
- Security
 - Network ACLs
 - Security groups
- DNS firewall
 - Rule groups
 - Domain lists
- Network Firewall
 - Firewalls

VPC > Route tables > rtb-0d122ea89b0b7d536 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/3)

<input type="checkbox"/>	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	my-subnet-01	subnet-00b33c689011ec66c	10.0.1.0/24	-	rtb-06d5016a6dad9350d / public_rt
<input checked="" type="checkbox"/>	private_02	subnet-05fca748e3f77be2f	10.0.4.0/24	-	Main (rtb-0a446091bb5a6ff66)
<input type="checkbox"/>	private_01	subnet-01be81f597a7e8b2d	10.0.3.0/24	-	rtb-040ea9caf07f4a886 / private_rt_1

Selected subnets

subnet-05fca748e3f77be2f / private_02 X

[Cancel](#) [Save associations](#)

13. In 'configure security groups' add the following rules

(Note : Select my ip from the source)

14. Click on Launch in the Last step, it will be selecting the existing keypair by

default, make a check on acknowledge and click launch instance
Your private Instance is created as below

The screenshot shows the 'Network settings' configuration page for a Lambda function. It includes fields for VPC, Subnet, Auto-assign public IP, Firewall (security groups), Security group name, and Description.

VPC - required Info
vpc-057414ec5bacb432d (my-vpc-01)
10.0.0.0/16

Subnet Info
subnet-05fca748e3f77be2f private_02
VPC: vpc-057414ec5bacb432d Owner: 280005775301 Availability Zone: ap-south-1a IP addresses available: 251 CIDR: 10.0.4.0/24

Create new subnet

Auto-assign public IP Info
Disable

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-5

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-5 created 2023-10-28T13:12:43.479Z

15. Similarly create another private Instance(created two instances)

The screenshot shows the 'Instances' list page with four entries. The first two instances, 'private_01' and 'private_02', are highlighted with a red border.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
private_01	i-004f53e19155e1649	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a	-
private_02	i-0932ec2bc487a717	Running	t2.micro	Initializing	No alarms	ap-south-1a	-

16. Your Instances will be successfully running but you cannot access them since it is a private instance.(we cant access)

```
base ~/Desktop/ssh-keys  
ssh -i "public_instance.pem" ec2-user@10.0.3.56
```