practice 3:

steps:

1. Create public subnet



2. Create private subnet

aws | ⠿ Services | 🔍 Search [Alt+S]

VPC > Subnets > Create subnet

# Create subnet Info

## VPC

**VPC ID**
Create subnets in this VPC.

vpc-063a0704b553bd558 (my-first-vpc) ▼

**Associated VPC CIDRs**

IPv4 CIDRs
10.0.0.0/24

## 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.

private-subnet-1

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.

Europe (London) / eu-west-2a ▼

IPv4 CIDR block **Info**

🔍 10.0.0.0/26 ✕

▼ Tags - *optional*

Key | Value - *optional*
🔍 Name ✕ | 🔍 private-subnet-1 ✕ | Remove

**Add new tag**

You can add 49 more tags.

**Remove**

**Add new subnet**

Cancel | **Create subnet**

3. Create ec2 instance and install docker



4.

Create key pair

# Create key pair

Key pair name

Key pairs allow you to connect to your instance securely.

my-key

The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.

## Key pair type

**RSA**
RSA encrypted private and public key pair

**ED25519**
ED25519 encrypted private and public key pair (Not supported for Windows instances)

## Private key file format

**.pem**
For use with OpenSSH

**.ppk**
For use with PuTTY

⚠ When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** Learn more ↗

Cancel          **Create key pair**

aws | ::: Services | Q Search | [Alt+S]

### ▼ Network settings Info

**VPC - *required* Info**

vpc-063a0704b553bd558 (my-first-vpc)
10.0.0/24 ▼ ↻

**Subnet Info**

subnet-0568f62acca73f7c9          private-subnet-1
VPC: vpc-063a0704b553bd558   Owner: 873827770697
Availability Zone: eu-west-2a   IP addresses available: 59   CIDR: 10.0.0/26) ▼ ↻ Create new subnet ↗

**Auto-assign public IP Info**

Enable ▼

**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-7

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-7 created 2023-05-28T09:29:51.830Z

**Inbound security groups rules**

▼ Security group rule 1 (TCP, 22, 0.0.0/0)      Remove

add user data:

☰

Metadata version  Info

| Select | ▼ |

Metadata response hop limit  Info

| Select |

Allow tags in metadata  Info

| Select | ▼ |

User data - *optional*  Info
Enter user data in the field.

```
sudo apt-get update
sudo apt-get install ca-certificates curl gnupg
sudo install -m 0755 -d /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o
/etc/apt/keyrings/docker.gpg
sudo chmod a+r /etc/apt/keyrings/docker.gpg
echo \
  "deb [arch="$(dpkg --print-architecture)" signed-
by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu \
  "$(. /etc/os-release && echo "$VERSION_CODENAME")" stable" | \
  sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin
docker-compose-plugin
|
```

☐ User data has already been base64 encoded

**Instances** (1) Info     | ↻ | Connect | Instance state ▼ | Actions ▼ | **Launch instances** | ▼ |

| Q Find instance by attribute or tag (case-sensitive) | ‹ 1 › ⚙ |

| Instance ID = i-0be8e5709ddc1475f ✕ | Clear filters |

| ☐ | Name | ▽ | Instance ID | Instance state | ▽ | Instance type | ▽ | Status check | Alarm status | Availability Zone | ▽ | Public IPv4 DNS |
|----|------|---|-------------|----------------|---|---------------|---|--------------|--------------|-------------------|---|-----------------|
| ☐ | my-first-instance | | i-0be8e5709ddc1475f | ⊘ Running | ⊕⊖ | t2.micro | | ⊕ Initializing | No alarms + | eu-west-2a | | – |