# Part 1

1. Configured VM using AWS EC2 service and ping the public IP address on local browser.

Graphical user interface, text, application, Word

Description automatically generated

1. Screenshot of the running instance of AWS VM with instance type as t2.micro.

A screenshot of a computer

Description automatically generated

1. Instance type changed from t2.micro to t2.small as per the requirement.

A screenshot of a computer

Description automatically generated

1. Captured the screenshot of the SSH session connected to the EC2 instance and executed Linux commands for testing.

Text

Description automatically generated

# Part 2

1. What is the purpose/use of the Amazon EC2 service?

Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) Cloud. Using Amazon EC2 eliminates your need to invest in hardware up front, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage.

1. What is an Amazon Machine Image (AMI)?

An Amazon Machine Image (AMI) is a supported and maintained image provided by AWS that provides the information required to launch an instance. You must specify an AMI when you launch an instance. You can launch multiple instances from a single AMI when you require multiple instances with the same configuration. You can use different AMIs to launch instances when you require instances with different configurations.

1. What is the purpose of user data when creating an EC2 instance?

When you launch an instance in Amazon EC2, you have the option of passing user data to the instance that can be used to perform common automated configuration tasks and even run scripts after the instance starts. You can pass two types of user data to Amazon EC2: shell scripts and cloud-init directives.

1. What do you use to control what types of traffic can access your Amazon EC2 instances?

A security group controls the traffic that is allowed to reach and leave the resources that it is associated with. For example, after you associate a security group with an EC2 instance, it controls the inbound and outbound traffic for the instance.

1. Why would you want to resize an Amazon EC2 instance?

As the needs change, you might find that your instance is over-utilized (the instance type is too small) or under-utilized (the instance type is too large). During this situation, we would want to resize the EC2 instance type.

1. A security group works like a firewall because it contains a set of rules that filter traffic coming into and out of an Amazon EC2 instance. By default, all non-local traffic is blocked. (Choose: Allowed, blocked, or neither)