**Ansible Assignment 2**

1. How can a list of hosts in a group be looped over within a template?

Ans: Looping over Filetrees with\_filetree recursively matches all files in a directory tree, enabling you to template a complete tree of files on a target system while retaining permissions and ownership.

1. What is Ansible's ad-hoc command?

Ans: Ansible ad hoc commands are one-liner Linux shell commands and playbooks are like a shell script, a collective of many commands with logic.

1. How do I set up Nginx using the Ansible playbook?

ANs: Step 1: Configure Ansible

You need to add your server in ansible host file, Syntax is given below, You need to open the /etc/ansible/hosts file with nano or vim text editor and add the web server

Change the credentials as per your environment, Save and exit from the vim text editor

Step 2: Creating Apache Playbook

You need to create a nginx-playbook.yml and you change it according to your requirement

1. How do I programmatically access the name of a variable?

Ans: {{ hostvars[inventory\_hostname]['ansible\_' ~ which\_interface]['ipv4']['address'] }}

1. How do Ansible and Puppet vary from one other?

Ans: The difference is that ansible-playbook can be run from centralised places, whereas Puppet needs an agent to run on each node.

1. What is the purpose of Ansible Tower, and what are its characteristics?

Ans: Ansible Tower is the easy-to-use UI and dashboard and REST API for Ansible. Centralize your Ansible infrastructure from a modern UI, featuring role-based access control, job scheduling, and graphical inventory management.

1. Describe how you'll recursively copy files to a destination host.

Ans: - hosts: web

tasks:

- name: Ansible copy files from a directory to remote server

copy:

src:/home/suru/surufolder/

dest:/home/suru/surubackup/

1. What is the most effective method for making content reusable and redistributable?

Ans: "include" is used to add a submodule or another file to a playbook. This means a code written once can be added to multiple playbooks.

"import" is an improvement of "include," which ensures that a file is added only once. This is helpful when a line is run recursively.

1. What are handlers, and what do they do?

ANs: handlers are special tasks that only get executed when triggered via the notify directive. Handlers are executed at the end of the play, once all tasks are finished

1. How can a user module generate encrypted passwords?

ANs: Use the integrated Hashing and encrypting strings and passwords to generate a hashed version of a password

1. What is the difference between dot notation and array notation for variables?

Ans: Ansible uses variables to manage differences between systems. With Ansible, you can execute tasks and playbooks on multiple different systems with a single command. To represent the variations among those different systems, you can create variables with standard YAML syntax, including lists and dictionaries.

1. What is the purpose of the Ansible synchronize module?

Ans: Ansible Synchronize is used to copy the files between remote servers (or) target hosts

1. What is the purpose of the Ansible firewalld module?

Ans: allows for addition or deletion of services and ports (either TCP or UDP) in either running or permanent firewalld rules.

1. What distinguishes the Ansible set fact module from vars, vars file, and include var?

Ans: With Ansible you can retrieve or discover certain variables containing information about your remote systems or about Ansible itself. Variables related to remote systems are called facts.

With facts, you can use the behavior or state of one system as configuration on other systems. For example, you can use the IP address of one system as a configuration value on another system. Variables related to Ansible are called magic variables.

1. When is it risky to use a variable to bulk-set task arguments?

Ans: constructing tasks like this is risky because the parameters and values passed to usermod\_args could be overwritten by malicious values in the host facts on a compromised target machine. TO solve this, set bulk variables at a level of precedence greater than host facts in the order of precedence found in Variable precedence: Where should I put a variable? (the example above is safe because play vars take precedence over facts)