**Ansible Assignment 1**

1. What is the difference between CI and CD?

Ans : CI is continuous integration where we often merge and change code.

CD is continuous deployment where we often deploy code by having new code builds to run.

1. What is Configuration Management, and how does it work?

Ans: Configuration management is a process for maintaining computer systems, servers, and software in a desired, consistent state.

1. What is Ansible, and describe it’s working?

Ans: Ansible is a tool which is used to automate IT tasks. Programs are written to automate and change the system which once done is removed and finished.

1. What distinguishes Ansible from other similar tools?

An: ANsible helps automation faster compared to other tools and is easy to use throughout the lifecycle.

1. What is the purpose of the Ansible Galaxy?

Ans: Users can share roles, a large repository like github where users can store data, use commands etc.

1. Can you go over the Ansible modules in detail?

Ans: They are small small pieces of code which can be run through command line. It executes each module on a node that is remotely managed and gathers values. They interact through APIs to perform tasks.

1. What is a YAML file, and how does Ansible use it?

Ans: It is an ansible playbook format which is easy for us to rea and write when compared to other formats. Starts with “---“ and ends with “…”

1. What are the different types of Ansible tasks?

Ans: The property ‘name’ defines the output that will be printed out when that task is about to be executed.

The example task invokes ‘debug’ module, which allows you to display messages in a play. These messages can be used to show debug information such as the contents of a variable or the output message returned by a command, for instance.

Each module has its own set of options and properties. The debug module expects a property named ‘msg’  containing the message to be printed out.

1. What are the best ways to use YAML files in high-level programming languages like Java, Python, and others?

Ans: One of the most common uses for YAML is to create configuration files. It's recommended that configuration files be written in YAML rather than JSON, even though they can be used interchangeably in most cases, because YAML has better readability and is more user-friendly.

1. How to set up a jump host to access servers having no direct access?

Ans: A **jump host** (also known as a **jump server**) is an intermediary host or an SSH gateway to a remote network, through which a connection can be made to another host in a dissimilar security zone

1. What are Ansible callback plugins?

Ans: Callback plugins enable adding new behaviors to Ansible when responding to events. By default, callback plugins control most of the output you see when running the command line programs

1. What is Ansible Inventory and what are the many types of it?

Ans: The Ansible inventory file defines the hosts and groups of hosts upon which commands, modules, and tasks in a playbook operate. The file can be in one of many formats depending on your Ansible environment and plugins.

1. What is an Ansible Vault, exactly?

Ans: It is like a storage place to keep confidential info like secret keys, passwords, encrypted keys etc…