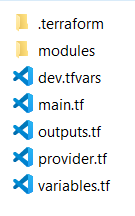
1. **What are different artifacts you need to create - name of the artifacts and its purpose**



Consider the above screenshot as an example where we use different artifacts which needs to create to provision Azure services to the Azure portal.

**.terraform :** In this folder,we store Terraform state file which contain sensitive data of resources generated by terraform. When we use local state file, the state is stored in JSON format.

**modules folder:** In this folder we keep all service modules

**main.tf :** This file used to call the module of the Azure services from the module folder

**outputs.tf :** This file used to outputs the variable value

**dev.tfvars :** This file used to maintain variables with key and its values specific to the environment

**variables.tf :** This file used to defines the variables which are required for infrastructure provision.

1. **List the tools you will to create and store the Terraform templates.**

We can create Terraform templates using VS studio code,Azure Cloud shell etc.

We can store this template in Git repo and Azure repos etc.

1. **Explain the process and steps to create automated deployment pipeline.**

Following are the steps we follow during execution of pipeline:

Terraform validate

Terraform init

Terraform plan

Terraform apply

Process and steps are created in yaml file.Please find the yaml code attached in the Azuredevopspipeline folder which is present under Q2-Scenario folder

**4) Create a sample Terraform template you will use to deploy Below services:**

**Vnet,2 Subnet,NSG to open port 80 and 443,1 Window VM in each subnet,1 Storage account**

Terraform modules are created and Please find the MaerskTerraform folder which is present under Q2-Scenario folder .

1. **Explain how will you access the password stored in Key Vault and use it as Admin Password in the VM Terraform template.**

We need to create library variable group in Azure devops where we need to link the keyvalut and in Azure Devops yaml pipeline we need to refer library variable group in yaml code.