Lab 7: Creating a Linux Virtual Machine using Password Authentication in Microsoft Azure (Terraform)

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Level: Beginner
Platform: Ubuntu Linux + Microsoft Azure
Prerequisite: Lab 1 to Lab 6

Learning Objective

Participants will learn how to:

- Create a Linux Virtual Machine using password authentication
- Configure admin username and password
- Disable SSH key authentication
- Provision VM using Terraform with password login

Learning Outcome

After completing this lab, participants will be able to:

- Deploy Linux VM using username/password
- Access VM using password authentication
- Understand authentication configuration in Terraform

Hands-On Lab

Step 1: Go to Terraform Directory

```
cd terraform-azure-lab
```

Step 2: Create Terraform File

```
touch linux_vm_password.tf
```

Step 3: Open File

```
nano linux_vm_password.tf
```

Step 4: Create Linux Virtual Machine (Password Based Login)

```
resource "azurerm_linux_virtual_machine" "vm_password" {
  name                = "Sandeep-machine-password"
  resource_group_name = azurerm_resource_group.rg1.name
  location            = azurerm_resource_group.rg1.location
  size                = "Standard_B1s"
  admin_username      = "azureuser"
  admin_password      = "Password@12345"  # Change this password
  disable_password_authentication = false

  network_interface_ids = [
    azurerm_network_interface.nic1.id
  ]

  os_disk {
    caching              = "ReadWrite"
    storage_account_type = "Standard_LRS"
  }

  source_image_reference {
    publisher = "Canonical"
    offer     = "0001-com-ubuntu-server-focal"
    sku       = "20_04-lts"
    version   = "latest"
  }
}
```

Step 5: Initialize Terraform

```
terraform init
```

Step 6: Preview Changes

```
terraform plan
```

Step 7: Apply Configuration

```
terraform apply
```

Type:

```
yes
```

Step 8: Verify in Azure Portal

Go to:

Resource Group → `rg-terraform-lab`

Verify: - Virtual Machine: `Sandeep-machine-password` - Status: Running - NIC attached - Public IP attached

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Step 9: Get Public IP of VM

```
az vm list-ip-addresses -g rg-terraform-lab -n Sandeep-machine-password -o table
```

Step 10: Connect to VM using Password

```
ssh azureuser@<PUBLIC_IP>
```

When prompted, enter password:

```
Password@12345
```

Step 11: Cleanup

```
terraform destroy
```

Type:

```
yes
```