Project1:

**Tools required:** Terraform, AWS account with security credentials, Keypair

**Expected Deliverables:**

* Launch an EC2 instance using Terraform
* Connect to the instance
* Install Jenkins, Java and Python in the instance

Step1: Create EC2 Window machine , T2 medium

Step2: Note down the key pair

Step3: download the csv for new user credential note down the ‘ACCESS key’ and ‘SECRET KEY’

Graphical user interface, application, table, Excel

Description automatically generated

Ste4:

Login to windows machine and download the msi and visual studio

<https://awscli.amazonaws.com/AWSCLIV2.msi--> create new folder in desktop and copy terraform.exe file there

<https://code.visualstudio.com/Download--install> the visual studio and open the Terraform form created above in the desktop

Step5:

Create file test.tf

Step6:

Now open the below link

<https://registry.terraform.io/providers/hashicorp/aws/latest/docs>

and go to aws instances and aws keypair and copy the below code

provider "aws" {

region = "us-east-1"

access\_key = "AKIASRPB4J6672S4337A"

secret\_key = "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"

}

resource "aws\_instance" "foo" {

ami = "ami-0f1ee03d06c4c659c"

key\_name = "window"

instance\_type = "t2.medium"

}

In the above code update the ACCESS KEY, SECRET KEY, REGION, AMI and KEY\_NAME.

Step6:

Run the below command in command shell:

Terraform init

Terraform plan

Terraform apply

Output is as below:

Text

Description automatically generated

Step7:

Install java

Graphical user interface, application

Description automatically generated

Update the JAVA\_HOME and path variable

Text

Description automatically generated with medium confidence

Install MAVEN:

Text

Description automatically generated

Step9: goto [www.jenkins.io/download/](http://www.jenkins.io/download/)

Jenkin is installed

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Created one job for hello world

Step10:

In global tool configuration add JDK 11 and MAVEN.

Step11:

Python is sintalled

Text

Description automatically generated

Step 12: running python file

Text

Description automatically generated

Python code in primeno.py:

#prime number program in python

num=int(input("Enter the number you want to check for Prime Number: "))

flag=1

if (num!=0):

for i in range (2,num-1):

if(num%i==0):

flag=0

break

else:

continue

if(flag==1):

print("number is a prime number")

else:

print("number is not a prime number")

else:

print("Number entered is 0 and not valid number")