Screenshots for Automating Infrastructure using Terraform

1. EC2 Instance created:

```
          + delete_on_termination = (known after apply)
          + device_name           = (known after apply)
          + encrypted             = (known after apply)
          + iops                  = (known after apply)
          + kms_key_id            = (known after apply)
          + tags                  = (known after apply)
          + throughput            = (known after apply)
          + volume_id             = (known after apply)
          + volume_size           = (known after apply)
          + volume_type           = (known after apply)
        }

      + timeouts {}
    }

Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

module.ec2_instance.aws_instance.this[0]: Creating...
module.ec2_instance.aws_instance.this[0]: Still creating... [10s elapsed]
module.ec2_instance.aws_instance.this[0]: Still creating... [20s elapsed]
module.ec2_instance.aws_instance.this[0]: Still creating... [30s elapsed]
module.ec2_instance.aws_instance.this[0]: Creation complete after 31s [id=i-0edb85da2879b5c8b]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
root@ip-172-31-29-144:/home/pratikchavhan19/ec2# terraform apt install jenkins
Terraform has no command named "apt". Did you mean "fmt"?

To see all of Terraform's top-level commands, run:
```

2. Creds.tf

```
provider "aws" {

    access_key = "ASIAQKTAFL33ART4SPPT"

    secret_key = "1AJn5B5ASwQ5wjB8f4VIsKNqH7fczhLmhxeW0eO8"

    token = "FwoGZXIvYXdzEM3//////////wEaDC75ELLALv6CqWYs3CK8ATnTB1N2l15G1YyIQUsIDNtxaC5yFautcIPGJyPQVdmvfHRjPPBFWB3X32l7sUUkB7nIRBY33CNWgoEU4NgnPiFZcAkK5GK206EDk7V2j2/+rZGez4VOhTM8RpaOCihw5C/vSa6CpA/0AXjwN0SHE08O0+yvcr4l5BAm/ACgxbko/HD7F/HIgsknsiHTq468JHbU3yhhX/nOHYAgJYqP3JzQJIsrpA2i8eKCbuf4ju+sWYg+RAiHclskhkFDKPuG+KYGMi11LcwsZszcwRKuiKddCSiWzMuh38y4wIGl6vEsVlKAxxDHfjWxrvmcaLC7zn0="
        region = "us-east-1"

}
~
~
~
~
~
~
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~
~
~
~
~
~
~
"creds.tf" 11L, 534C                                                    7,384        All
```

3. Main.tf:

```
module "ec2_instance" {
  source  = "terraform-aws-modules/ec2-instance/aws"

  name = "single-instance"

  instance_type          = "t2.micro"
  key_name               = "user1"
  monitoring             = true
  vpc_security_group_ids = ["sg-0adc5e9047a723bfd"]
  subnet_id              = "subnet-07f78217c6c089d3c"

  tags = {
    Terraform   = "true"
    Environment = "dev"
  }
}
```
```
"main.tf" 16L, 384C                                          5,0-1        All
```

4. JAVA Installed:

```
Verifying  : libXau-1.0.8-2.1.amzn2.0.2.x86_64                                        10/28
Verifying  : libSM-1.2.2-2.amzn2.0.2.x86_64                                           11/28
Verifying  : libXrender-0.9.10-1.amzn2.0.2.x86_64                                     12/28
Verifying  : dejavu-sans-fonts-2.33-6.amzn2.noarch                                    13/28
Verifying  : fontconfig-2.13.0-4.3.amzn2.x86_64                                       14/28
Verifying  : libX11-1.6.7-3.amzn2.0.3.x86_64                                          15/28
Verifying  : libXt-1.1.5-3.amzn2.0.2.x86_64                                           16/28
Verifying  : giflib-4.1.6-9.amzn2.0.2.x86_64                                          17/28
Verifying  : libXinerama-1.1.3-2.1.amzn2.0.2.x86_64                                   18/28
Verifying  : dejavu-sans-mono-fonts-2.33-6.amzn2.noarch                               19/28
Verifying  : python-lxml-3.2.1-4.amzn2.0.4.x86_64                                     20/28
Verifying  : libxslt-1.1.28-6.amzn2.x86_64                                            21/28
Verifying  : python-javapackages-3.4.1-11.amzn2.noarch                                22/28
Verifying  : libXtst-1.2.3-1.amzn2.0.2.x86_64                                         23/28
Verifying  : alsa-lib-1.1.4.1-2.amzn2.x86_64                                          24/28
Verifying  : fontpackages-filesystem-1.44-8.amzn2.noarch                              25/28
Verifying  : libICE-1.0.9-9.amzn2.0.2.x86_64                                          26/28
Verifying  : libX11-common-1.6.7-3.amzn2.0.3.noarch                                   27/28
Verifying  : javapackages-tools-3.4.1-11.amzn2.noarch                                 28/28

Installed:
  java-17-amazon-corretto.x86_64 1:17.0.8+7-1.amzn2.1
```

5. <u>Python Installed:</u>

```
[ec2-user@ip-172-31-45-153 ~]$ sudo yum install python
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                                                                       | 3.7 kB  00:00:00
Package python-2.7.18-1.amzn2.0.6.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-172-31-45-153 ~]$ python -version
Unknown option: -e
usage: python [option] ... [-c cmd | -m mod | file | -] [arg] ...
Try `python -h' for more information.
[ec2-user@ip-172-31-45-153 ~]$ python --version
Python 2.7.18
```

6. <u>Jenkins Installed:</u>

```
=================================================================================================
Installing:
 jenkins                    noarch                2.419-1.1              jenkins                85 M

Transaction Summary
=================================================================================================
Install  1 Package

Total download size: 85 M
Installed size: 85 M
Is this ok [y/d/N]: y
Downloading packages:
jenkins-2.419-1.1.noarch.rpm                                                     | 85 MB  00:00:05
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : jenkins-2.419-1.1.noarch                                                        1/1
  Verifying  : jenkins-2.419-1.1.noarch                                                        1/1

Installed:
  jenkins.noarch 0:2.419-1.1

Complete!
[ec2-user@ip-172-31-45-153 ~]$
```