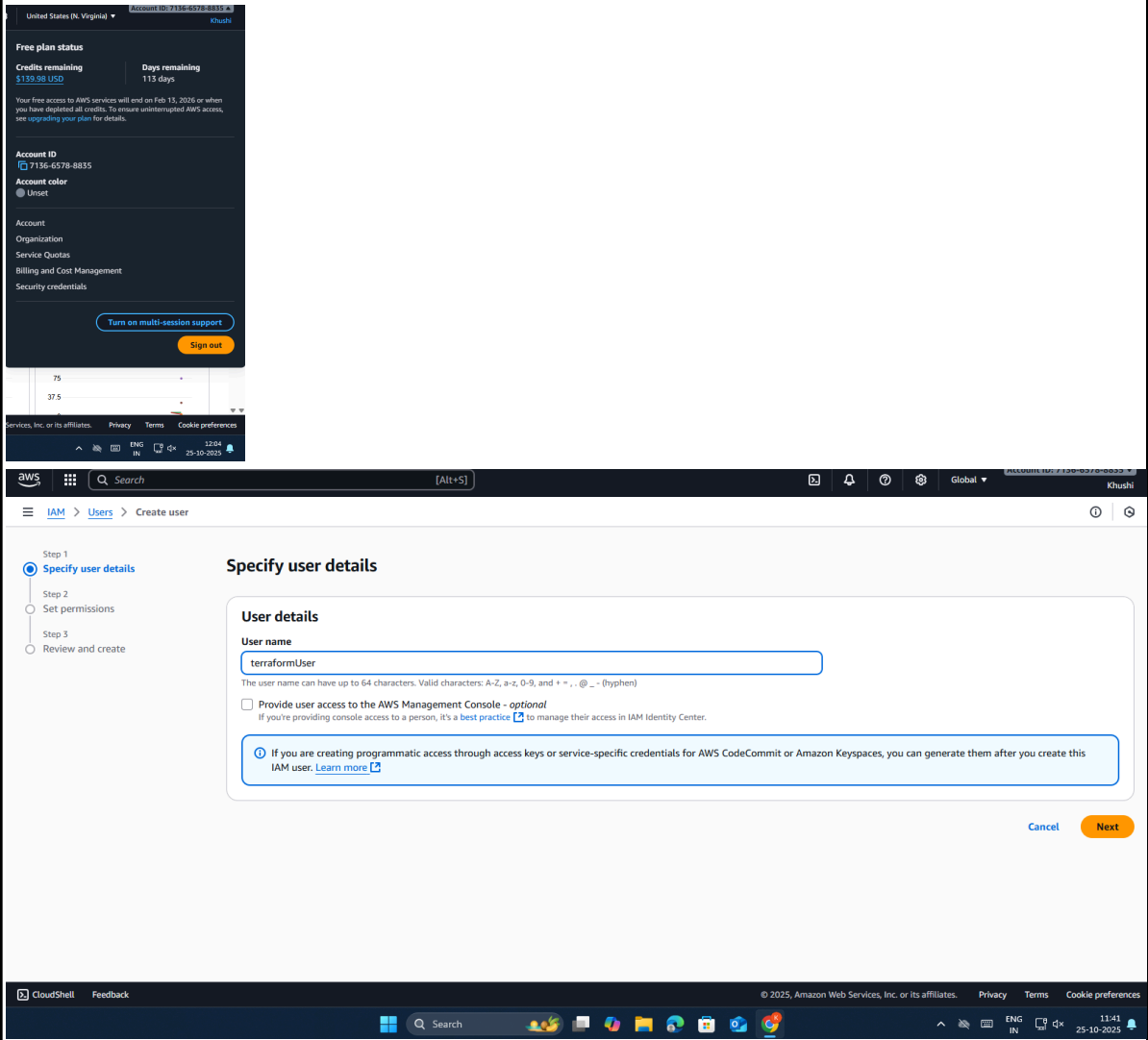


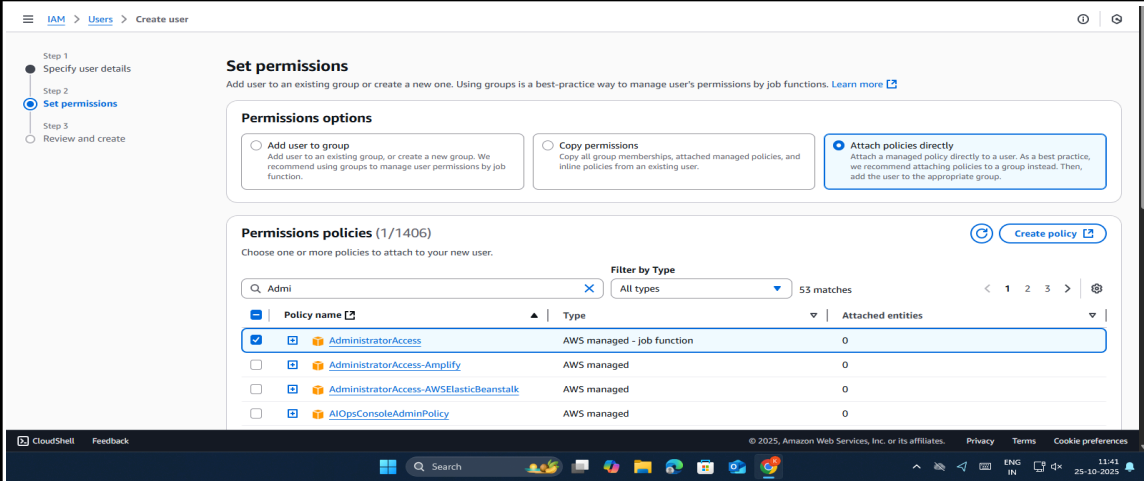
**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	

Sr No	Problem Statement (Type here): To install terraform on a Windows/Linux machine and build,apply and destroy EC2 instance over AWS using terraform
1.	<p>Step 1 :Login into aws account go to users select create user</p> <p>Screenshot 1:</p>  <p>The screenshot shows the AWS IAM console. The top section displays account information: 'United States (N. Virginia)', 'Account ID: 7136-6578-8835', 'Credits remaining: \$139.96 USD', and 'Days remaining: 113 days'. Below this, there's a 'Specify user details' section with a 'User name' field containing 'terraformUser'. A checkbox for 'Provide user access to the AWS Management Console - optional' is present and unchecked. A blue box contains a note about generating credentials after user creation. The bottom navigation bar shows 'IAM &gt; Users &gt; Create user'.</p>
2.	<p>Step 2 (internal step 1):select the Attach policies directly option and select the AdministratorAccess</p> <p>Screenshot 2:</p>

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	



**Set permissions**  
Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

**Permissions options**

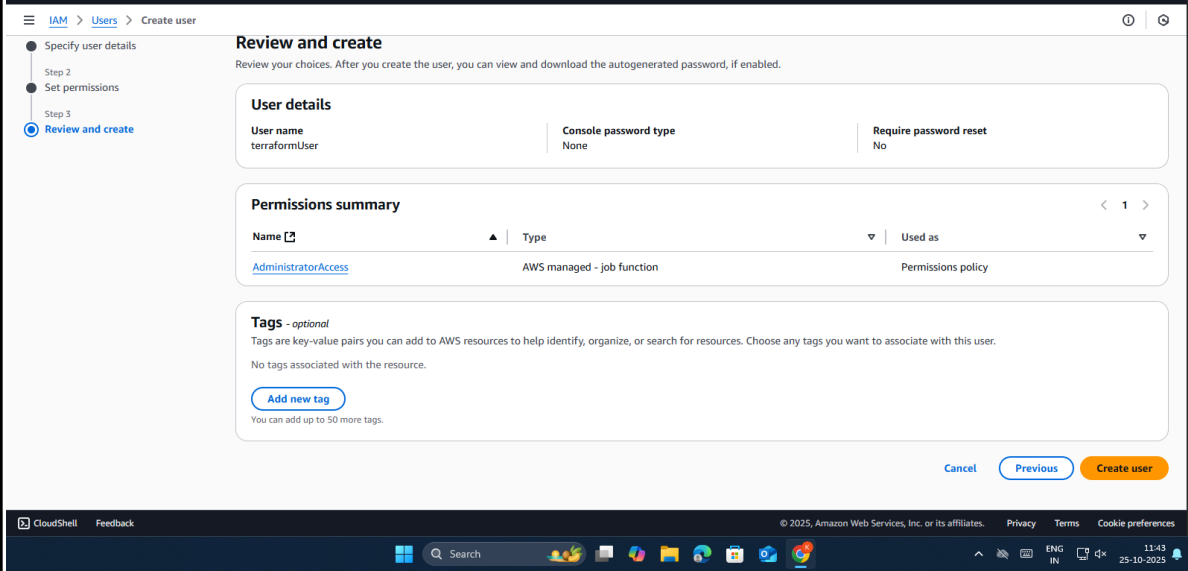
- ☐ Add user to group  
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.
- ☐ Copy permissions  
Copy all group memberships, attached managed policies, and inline policies from an existing user.
- ☒ Attach policies directly  
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

**Permissions policies (1/1406)**  
Choose one or more policies to attach to your new user.

Search: Admi Filter by Type: All types 53 matches

Policy name	Type	Attached entities
<input checked="" type="checkbox"/> AdministratorAccess	AWS managed - job function	0
<input type="checkbox"/> AdministratorAccess-Amplify	AWS managed	0
<input type="checkbox"/> AdministratorAccess-AWSElasticBeanstalk	AWS managed	0
<input type="checkbox"/> AIOpsConsoleAdminPolicy	AWS managed	0

3. Step 3 (internal step 2): Click on create user and create the user successfully  
Screenshot 3:



**Review and create**  
Review your choices. After you create the user, you can view and download the autogenerated password, if enabled.

**User details**

User name: terraformUser	Console password type: None	Require password reset: No
--------------------------	-----------------------------	----------------------------

**Permissions summary**

Name	Type	Used as
AdministratorAccess	AWS managed - job function	Permissions policy

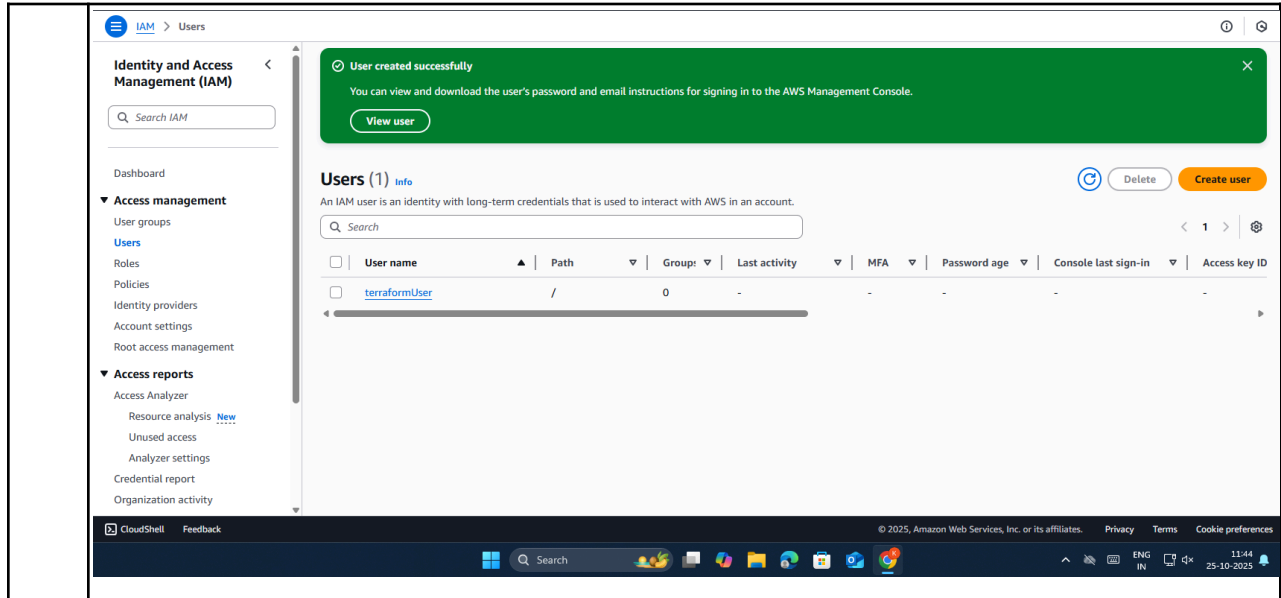
**Tags - optional**  
Tags are key-value pairs you can add to AWS resources to help identify, organize, or search for resources. Choose any tags you want to associate with this user.  
No tags associated with the resource.  
[Add new tag](#)  
You can add up to 50 more tags.

[Cancel](#)
[Previous](#)
[Create user](#)

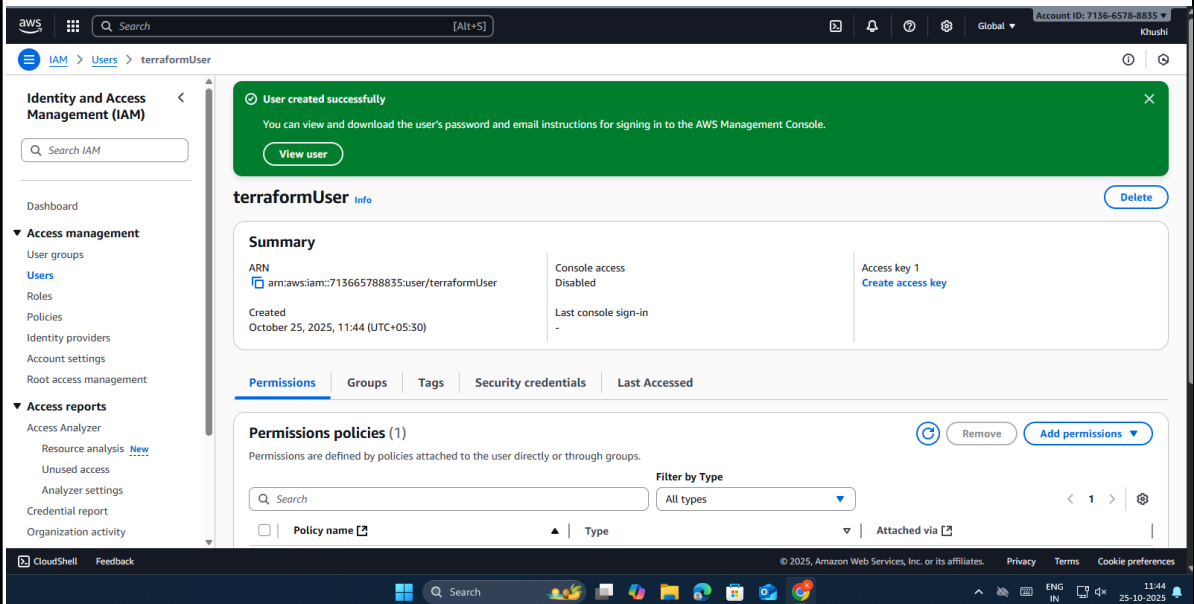
4. Step 4 (internal step 3): The user is created successfully click on the user  
Screenshot 4:

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	



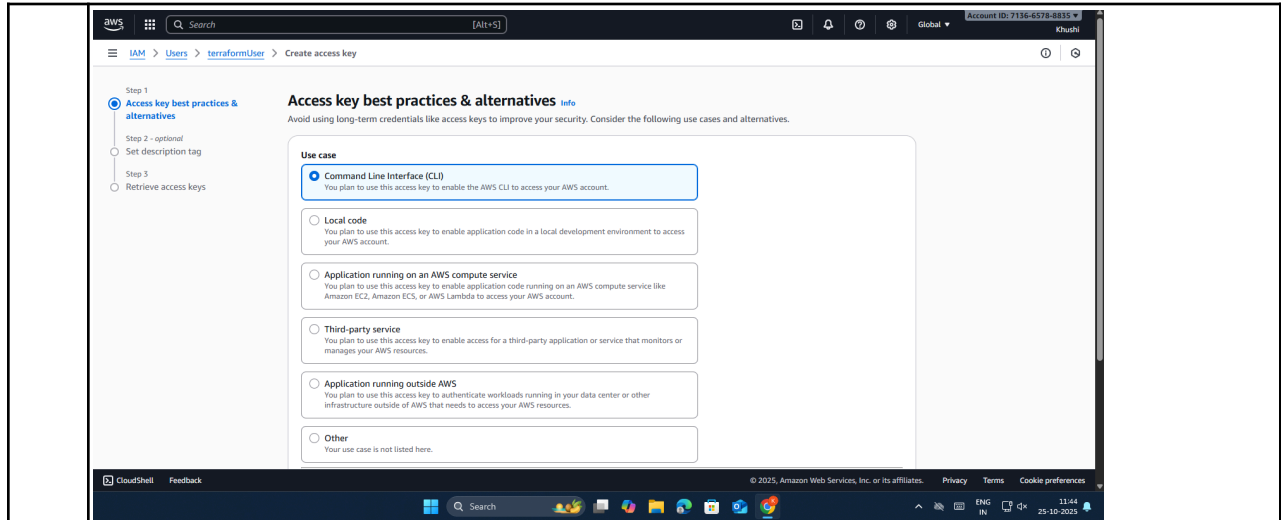
5. Step 5 (stop/delete step) :click on create access key  
Screenshot 5:



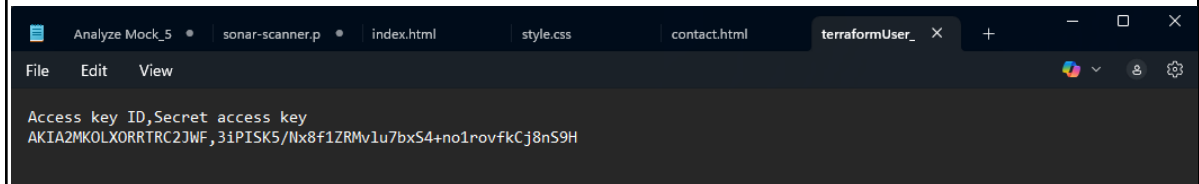
- Step 6:Select command line interface  
Screenshot 6:

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

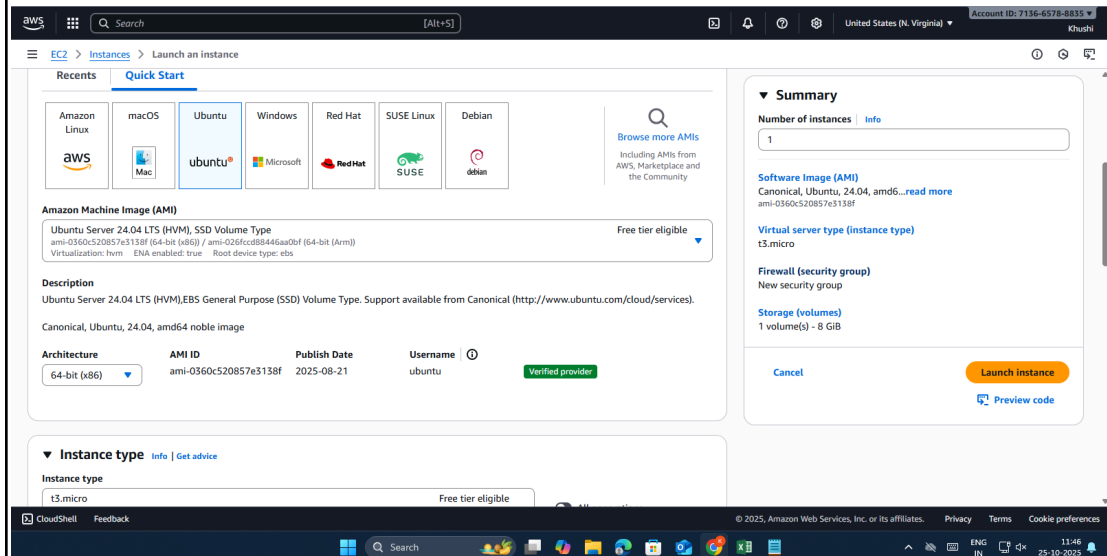
Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	



Step 7:Download the csv file and copy the access key and secret key  
Screenshot 7:



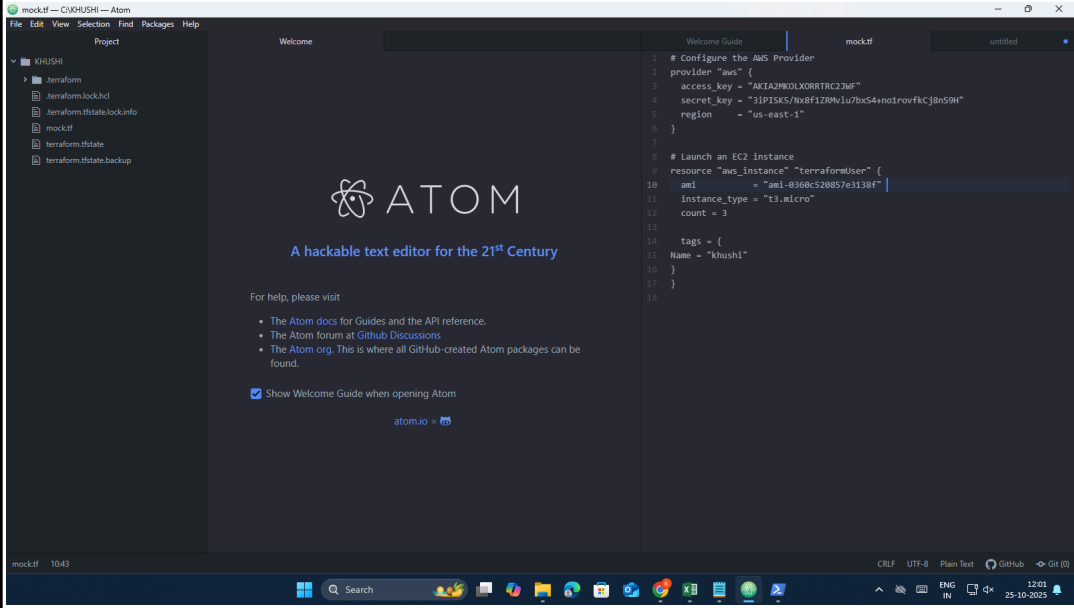
Step 8:From launch instance copy the ami id  
Screenshot 8:



Step 9:Create an atom file and write the code.  
Screenshot 9:

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

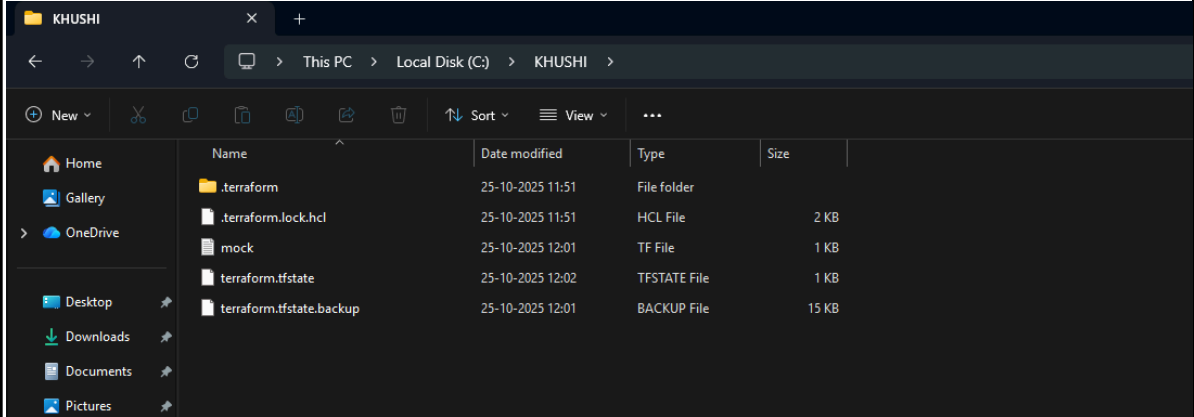
Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	



The screenshot shows the Atom text editor with a Terraform configuration file named `mock.tf`. The file content is as follows:

```
1 # Configure the AWS Provider
2 provider "aws" {
3   access_key = "AKIA2HWOLXORRTRC2JMF"
4   secret_key = "31PISK5/Nx8f128%lu7bx54+no1rovfcJ8n5H"
5   region    = "us-east-1"
6 }
7
8 # Launch an EC2 instance
9 resource "aws_instance" "terraformUser" {
10  ami           = "ami-0360c526857e3138f"
11  instance_type = "t3.micro"
12  count         = 3
13
14  tags = {
15    Name = "khushi"
16  }
17 }
18
```

The Atom interface includes a sidebar with a file explorer showing the project structure: `.terraform`, `.terraform.lock.hcl`, `mock.tf`, `terraform.tfstate`, and `terraform.tfstate.backup`. The main editor area displays the Terraform code with syntax highlighting. The status bar at the bottom shows the file path and various settings.



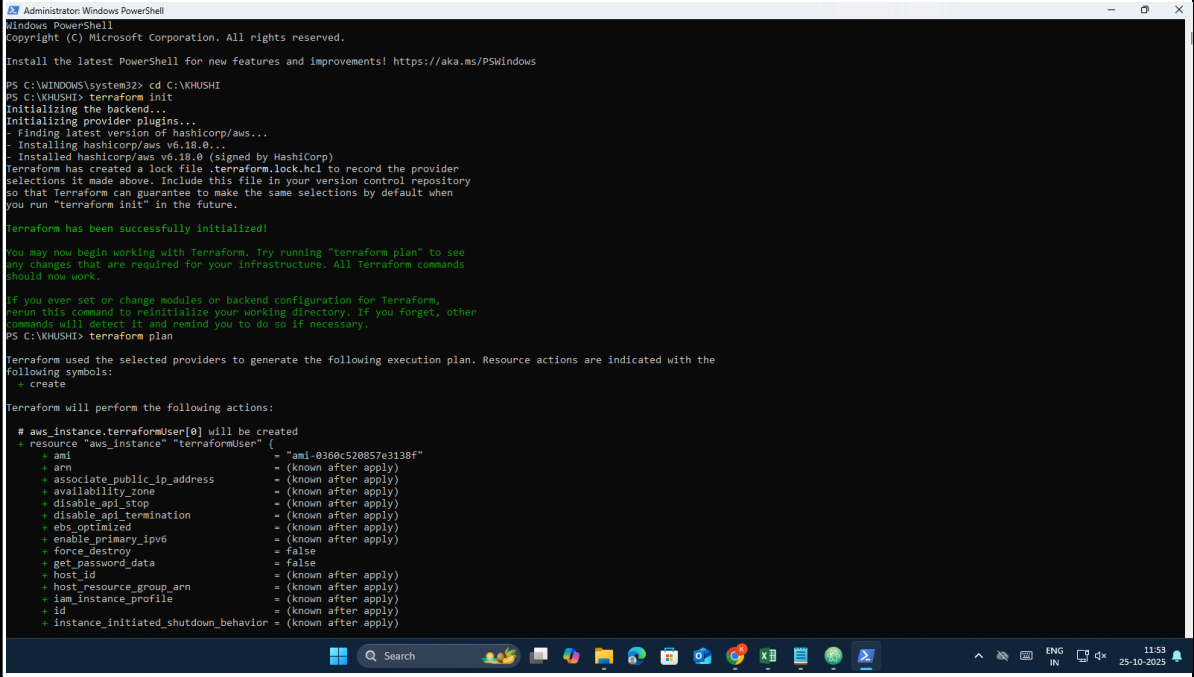
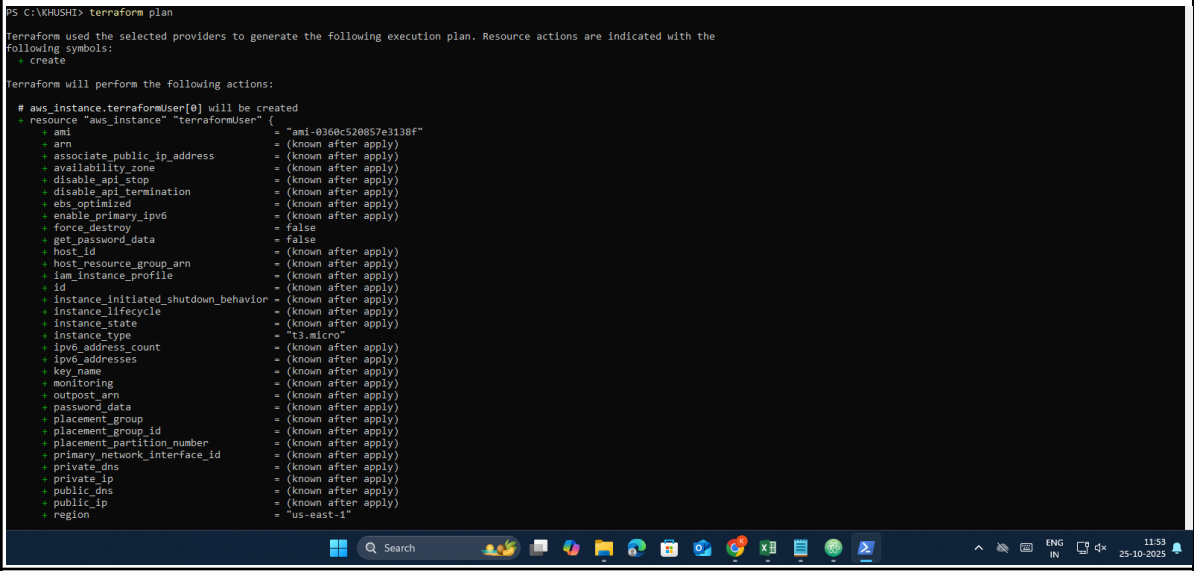
The screenshot shows the Windows File Explorer view of the `KHUSHI` folder. The folder contains the following files:

Name	Date modified	Type	Size
.terraform	25-10-2025 11:51	File folder	
.terraform.lock.hcl	25-10-2025 11:51	HCL File	2 KB
mock	25-10-2025 12:01	TF File	1 KB
terraform.tfstate	25-10-2025 12:02	TFSTATE File	1 KB
terraform.tfstate.backup	25-10-2025 12:01	BACKUP File	15 KB

Step 10: open powershell as administrator and give the path to your file and perform terraform init command  
 Screenshot 10:

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	


<p>Step 11:perform terraform plan command.</p> <p>Screenshot 11:</p> 
<p>Step 12:Perform terraform apply command</p> <p>Screenshot 12:</p>

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	

<pre>PS C:\KHUSHI&gt; terraform apply  Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:   + create  Terraform will perform the following actions:  # aws_instance.terraformUser[0] will be created + resource "aws_instance" "terraformUser" {   + ami                    = "ami-036ac520857e3138f"   + arn                   = (known after apply)   + associate_public_ip_address = (known after apply)   + availability_zone      = (known after apply)   + disable_api_stop      = (known after apply)   + disable_api_termination = (known after apply)   + ebs_optimized          = (known after apply)   + enable_primary_ipv6    = (known after apply)   + force_destroy          = false   + get_password_data      = false   + host_id                = (known after apply)   + host_resource_group_arn = (known after apply)   + iam_instance_profile   = (known after apply)   + id                     = (known after apply)   + instance_initiated_shutdown_behavior = (known after apply)   + instance_lifecycle     = (known after apply)   + instance_state         = (known after apply)   + instance_type          = "t3.micro"   + ipv6_address_count     = (known after apply)   + ipv6_addresses         = (known after apply)   + key_name               = (known after apply)   + monitoring             = (known after apply)   + outpost_arn            = (known after apply)   + password_data          = (known after apply)   + placement_group        = (known after apply)   + placement_group_id     = (known after apply)   + placement_partition_number = (known after apply)   + primary_network_interface_id = (known after apply)   + private_dns            = (known after apply)   + private_ip             = (known after apply)   + public_dns             = (known after apply)   + public_ip              = (known after apply)   + region                 = "us-east-1"   + secondary_private_ips  = (known after apply)   + security_groups        = (known after apply)   + source_dest_check      = true   + spot_instance_request_id = (known after apply) }</pre> <pre>aws_instance.terraformUser[2]: Creating... aws_instance.terraformUser[0]: Creating... aws_instance.terraformUser[1]: Creating... aws_instance.terraformUser[2]: Still creating... [00m10s elapsed] aws_instance.terraformUser[0]: Still creating... [00m10s elapsed] aws_instance.terraformUser[1]: Still creating... [00m10s elapsed] aws_instance.terraformUser[2]: Creation complete after 17s [id=i-0eff92f846fcb640b] aws_instance.terraformUser[1]: Creation complete after 19s [id=i-05fe022c1b3cb418e] aws_instance.terraformUser[0]: Creation complete after 20s [id=i-059b326e854aa9c18]  Apply complete! Resources: 3 added, 0 changed, 0 destroyed. PS C:\KHUSHI&gt;</pre>	
Step 13:The instances with tag khushi is shown running. Screenshot 13:	

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
praj	i-059b326e854aa9c18	Terminated	t3.micro	-	View alarms +	us-east-1a	-
khushi	i-08719dbfbc1a453	Running	t3.micro	2/2 checks passed	View alarms +	us-east-1a	ec2-50-16-2-217.com
praj	i-05fe022c1b3cb418e	Terminated	t3.micro	-	View alarms +	us-east-1a	-
praj	i-0eff92f846fcb640b	Terminated	t3.micro	-	View alarms +	us-east-1a	-

Step 14: Perform terraform destroy command to terminate the instances.

Screenshot 14:

**St. Francis Institute of Technology**  
**Borivali (West), Mumbai-400103**  
**Department of Information Technology**  
**ADL Practical Exam**

Name: Khushi Senghani	Date:25/10/25
Class:TEITB3	Exam seat no:
PID: 231104	Time:11:15-12:15
Roll No:37	No. of Pages:
Duration: One Hour	

```
Apply complete! Resources: 3 added, 0 changed, 0 destroyed.
PS C:\KHUSHI> terraform destroy
aws_instance.terraformUser[1]: Refreshing state... [id=i-0182a2baa742076cb]
aws_instance.terraformUser[2]: Refreshing state... [id=i-08719dbfbfcea4a53]
aws_instance.terraformUser[0]: Refreshing state... [id=i-0d7d4b9e383c958f9]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
destroy

Terraform will perform the following actions:

# aws_instance.terraformUser[0] will be destroyed
+ resource "aws_instance" "terraformUser" {
  - ami                  = "ami-0360c520857e3138f" -> null
  - ami                 = "arn:aws:ec2:us-east-1:713665788835:instance/i-0d7d4b9e383c958f9" -> null
  - associate_public_ip_address = true -> null
  - availability_zone      = "us-east-1a" -> null
  - disable_api_stop       = false -> null
  - disable_api_termination = false -> null
  - ebs_optimized          = false -> null
  - force_destroy          = false -> null
  - get_password_data      = false -> null
  - hibernation             = false -> null
  - id                     = "i-0d7d4b9e383c958f9" -> null
  - instance_initiated_shutdown_behavior = "stop" -> null
  - instance_state         = "running" -> null
  - instance_type          = "t3.micro" -> null
  - ipv6_address_count      = 0 -> null
  - ipv6_addresses         = [] -> null
  - monitoring              = false -> null
  - placement_partition_number = 0 -> null
  - primary_network_interface_id = "eni-0ab31c530f00394d0" -> null
  - private_dns             = "ip-172-31-26-91.ec2.internal" -> null
}
```