**School of Computer Science**

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES DEHRADUN, UTTARAKHAND**



System Provisioning And Configuration Management

Lab File (2022-2023)

for  
6th Semester

**SUBMITTED TO SUBMITTED BY**

DR. HITESH KUMAR SHARMA Alisha Parveen

B.TECH CSE – 6th SEM

DEVOPS - BATCH 1

500091204

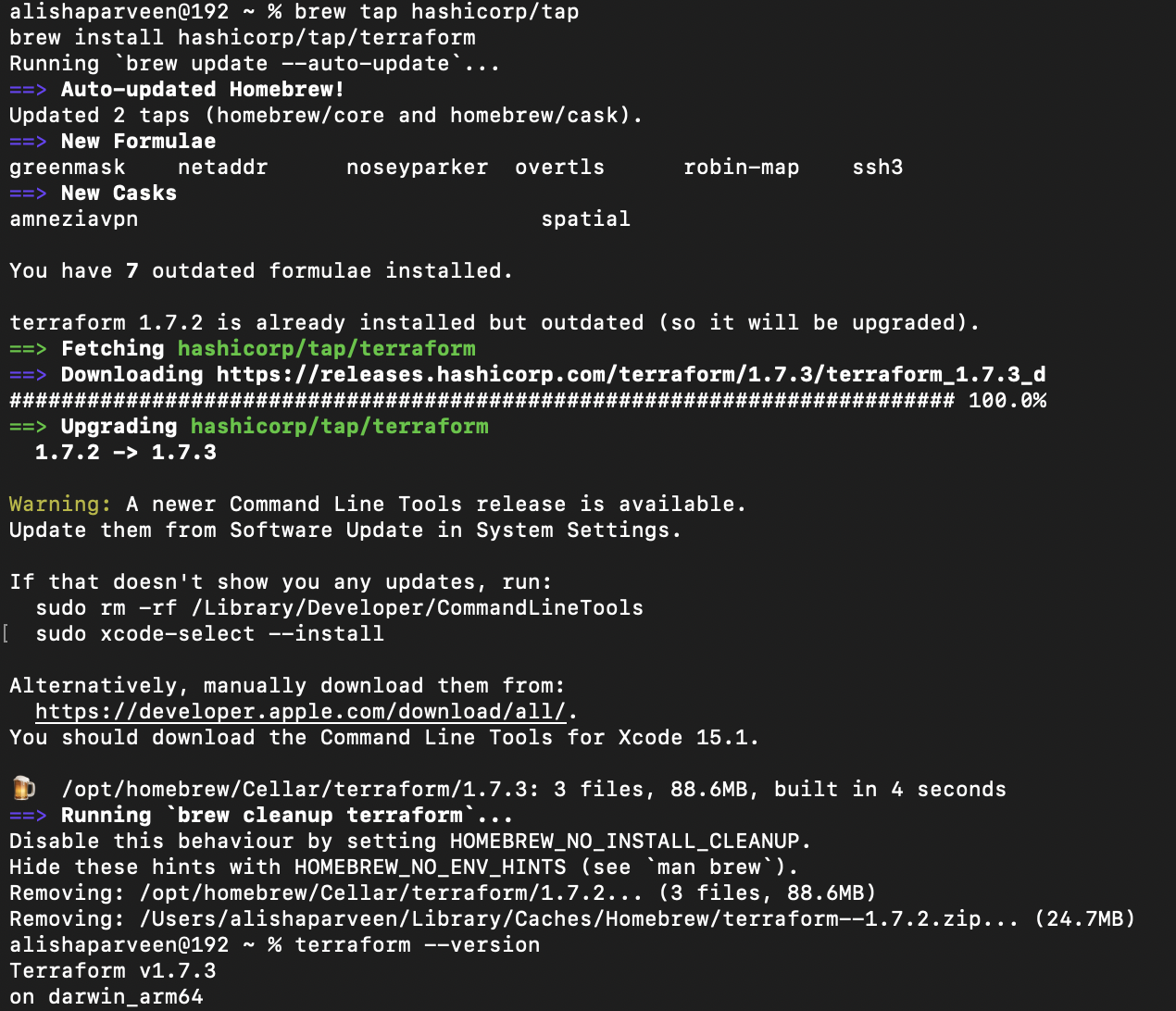
**Lab Exercise 1– Install Terraform on Windows**

Installing Terraform on Windows requires you to download the correct Terraform package, unpack,

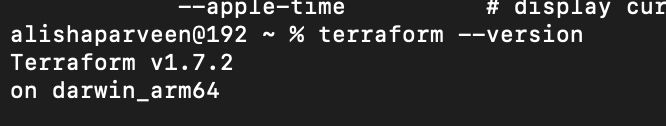
and execute it via the CLI.

1. Installing Terraform for Mac Via Brew

* Command 2 – brew install hashicrop/tap/terraform



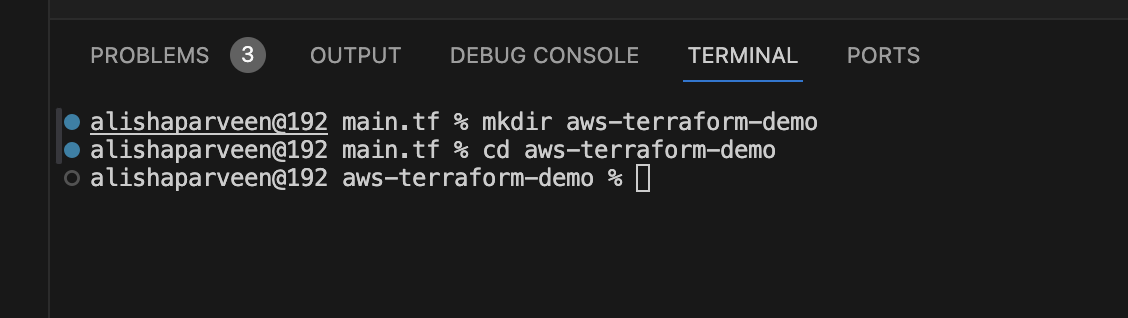
1. Checking for version



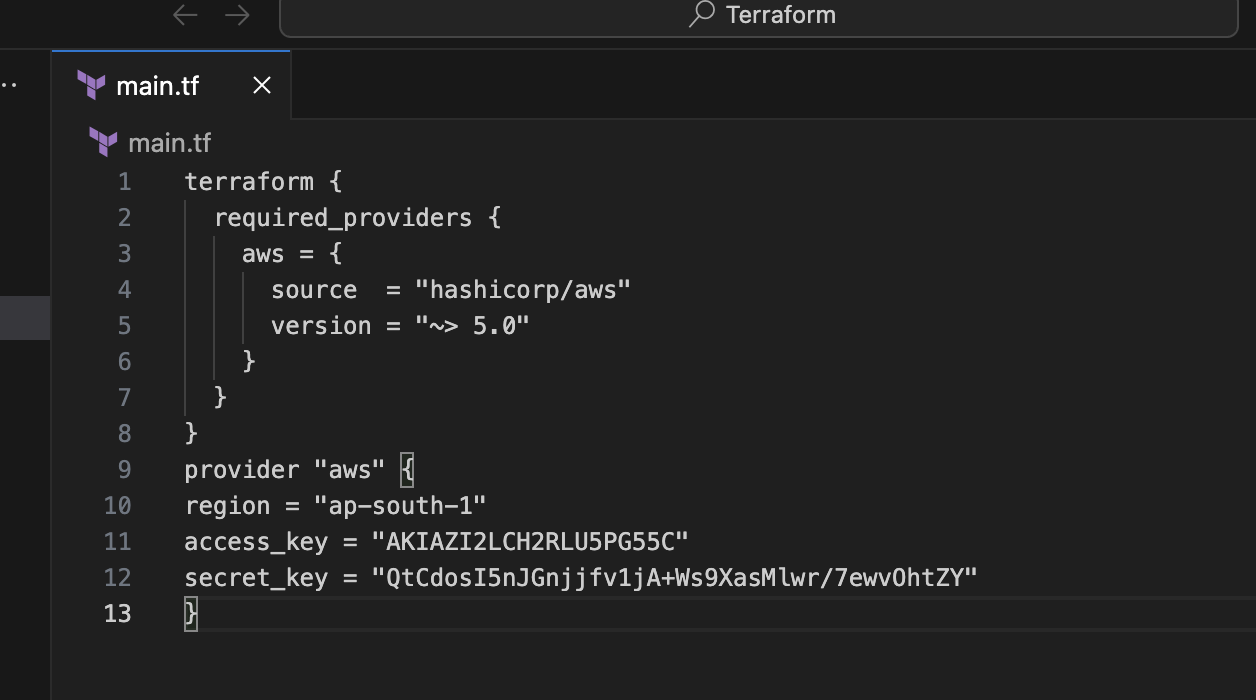
**Lab Exercise 2– Terraform AWS Provider and**

**IAM User Setting**

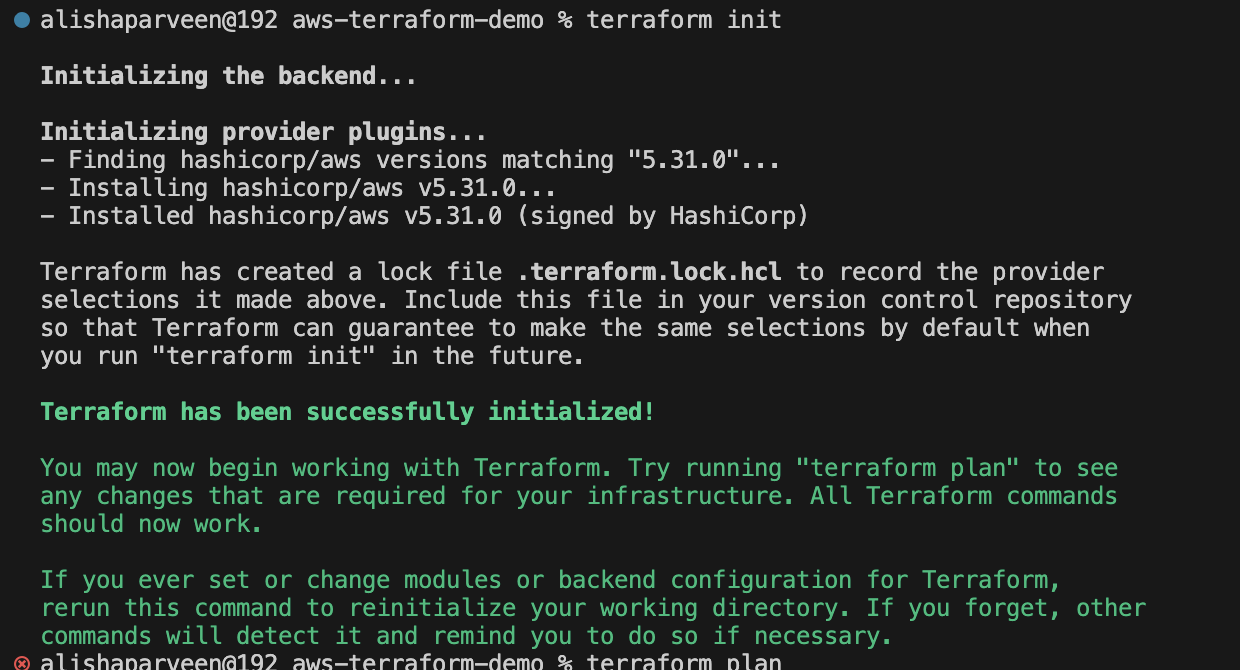
**Step 1: Create a New Directory:**

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**Step 2: Create Terraform Configuration File (main.tf):**

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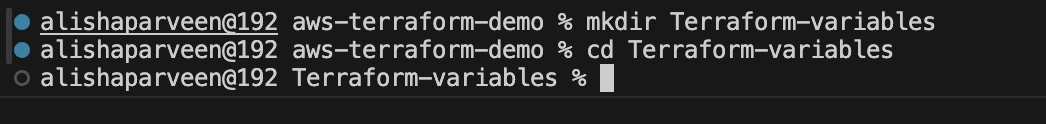
**Step 3: Initialize Terraform:**

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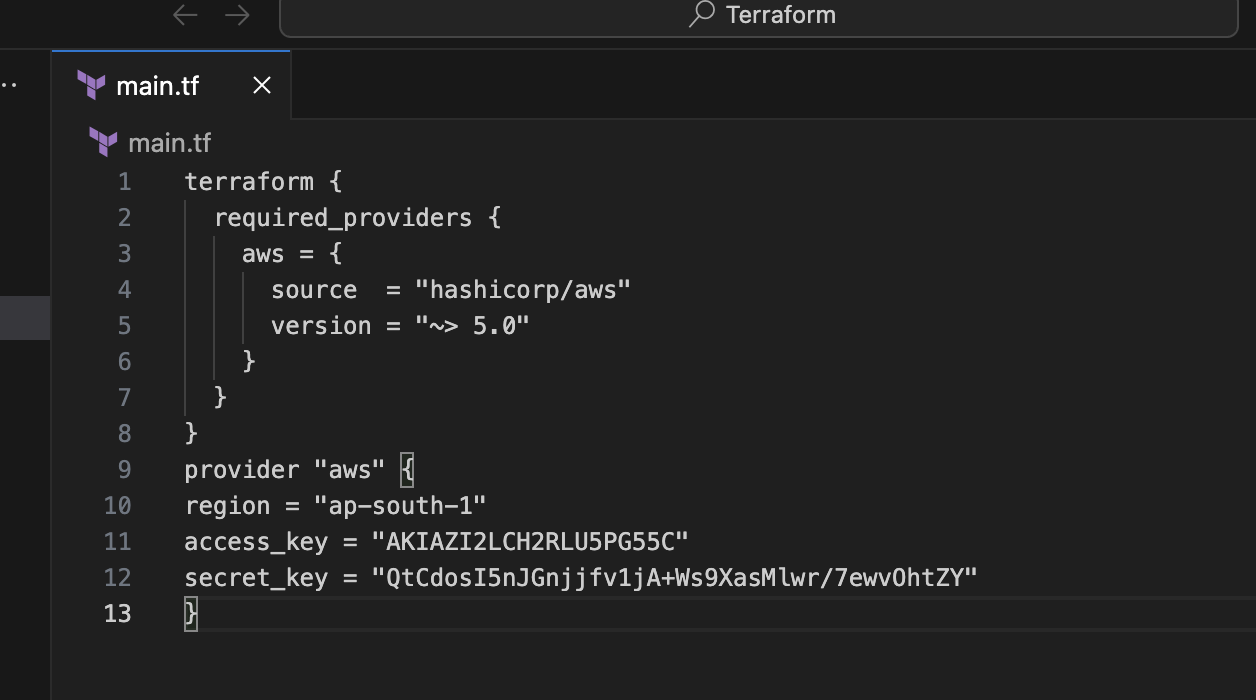
**Lab Exercise 3–Provisioning an EC2 Instance on**

**AWS**

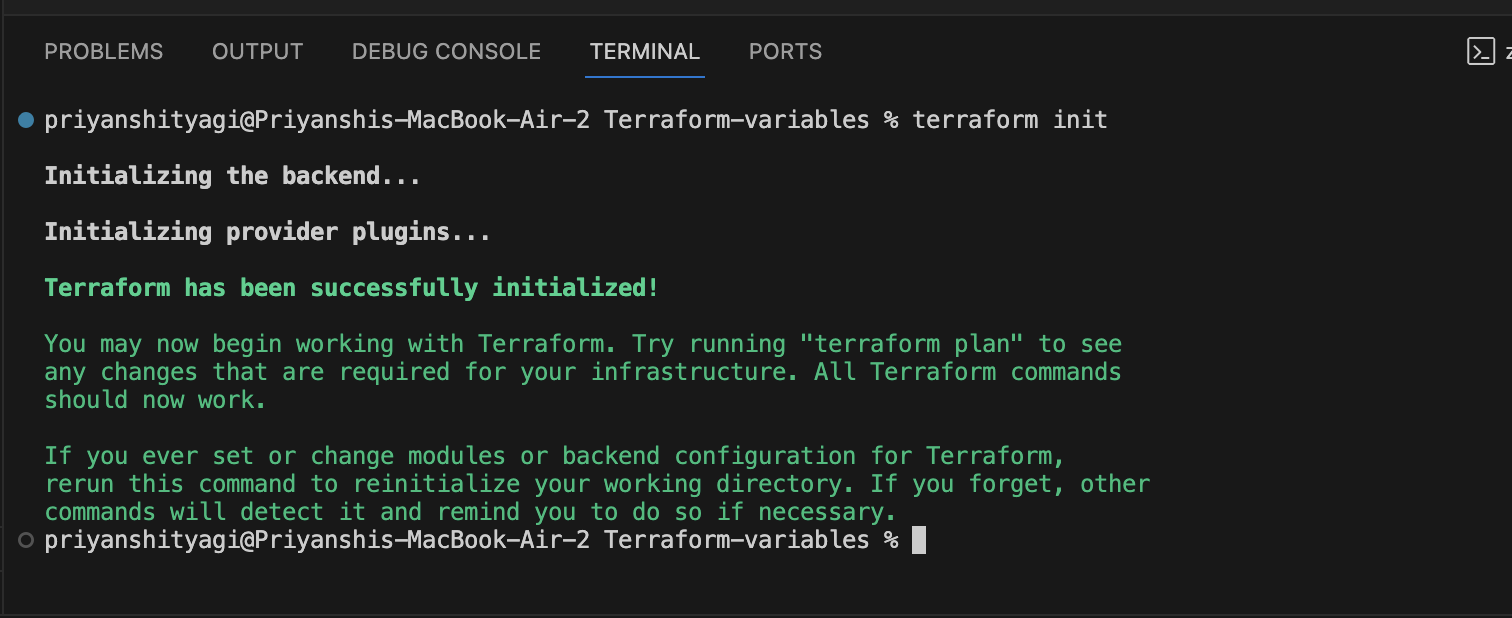
**Step 1: Create a New Directory:**

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**Step 2: Create Terraform Configuration File (main.tf):**

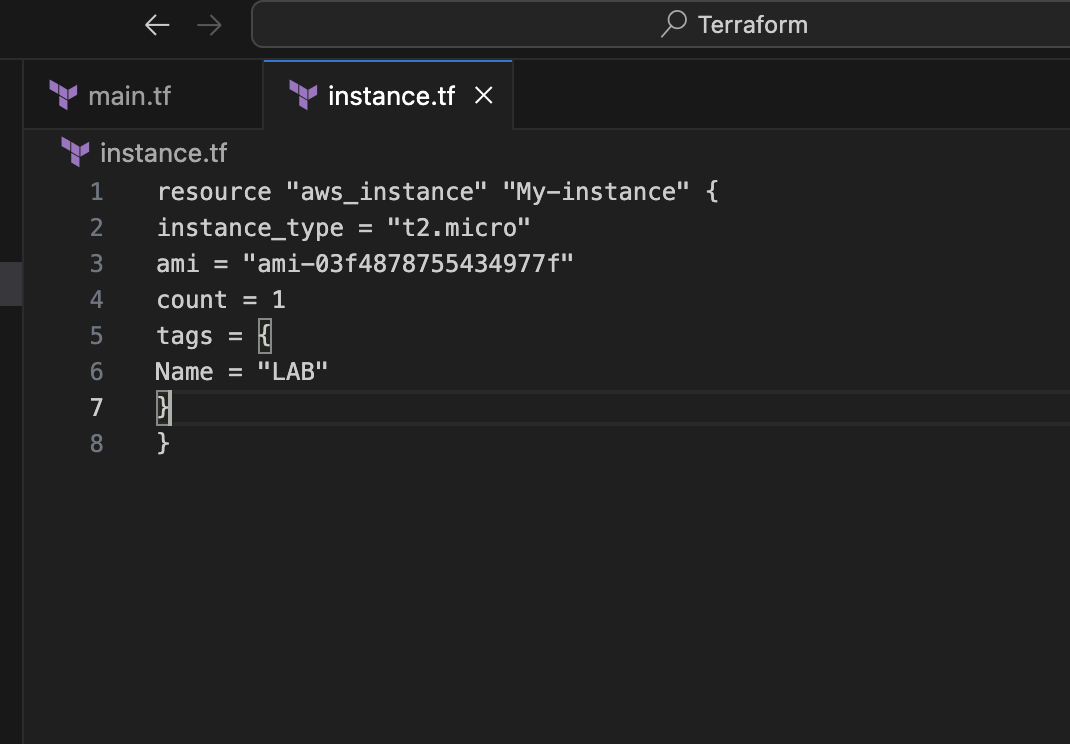
****

**Step 3: Initialize Terraform:**

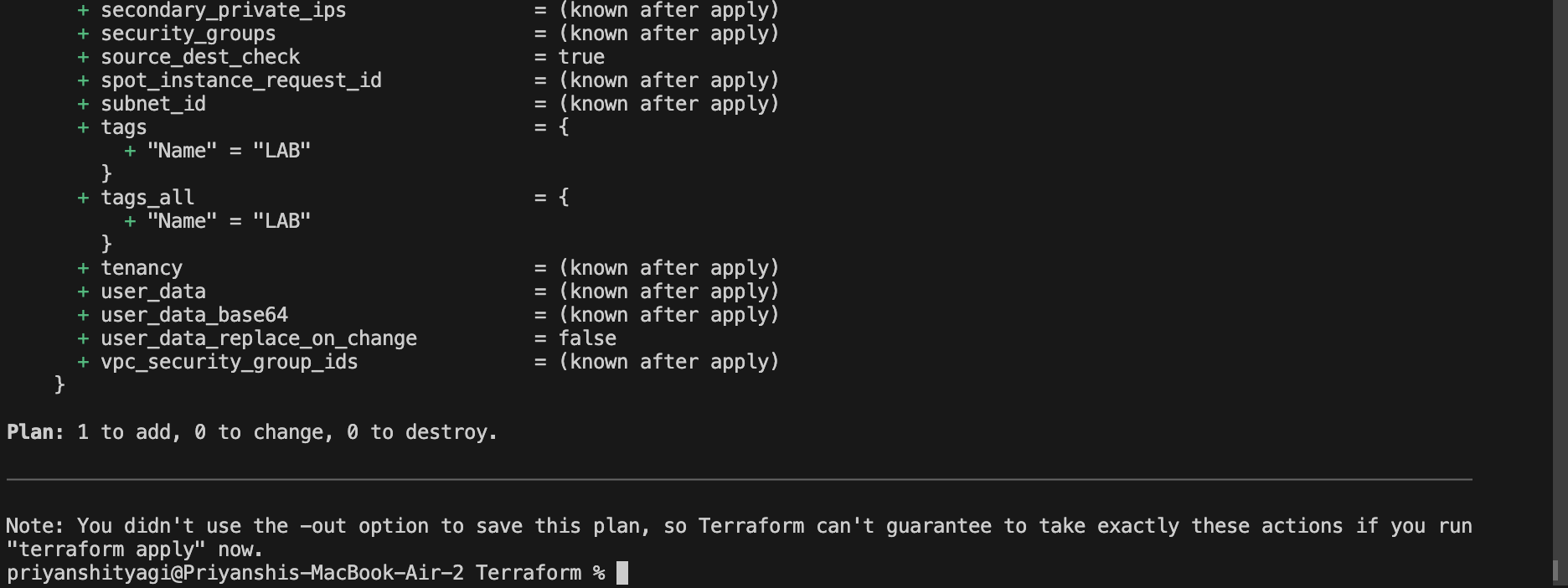
****

**Step 4: Create Terraform Configuration File for EC2 instance**

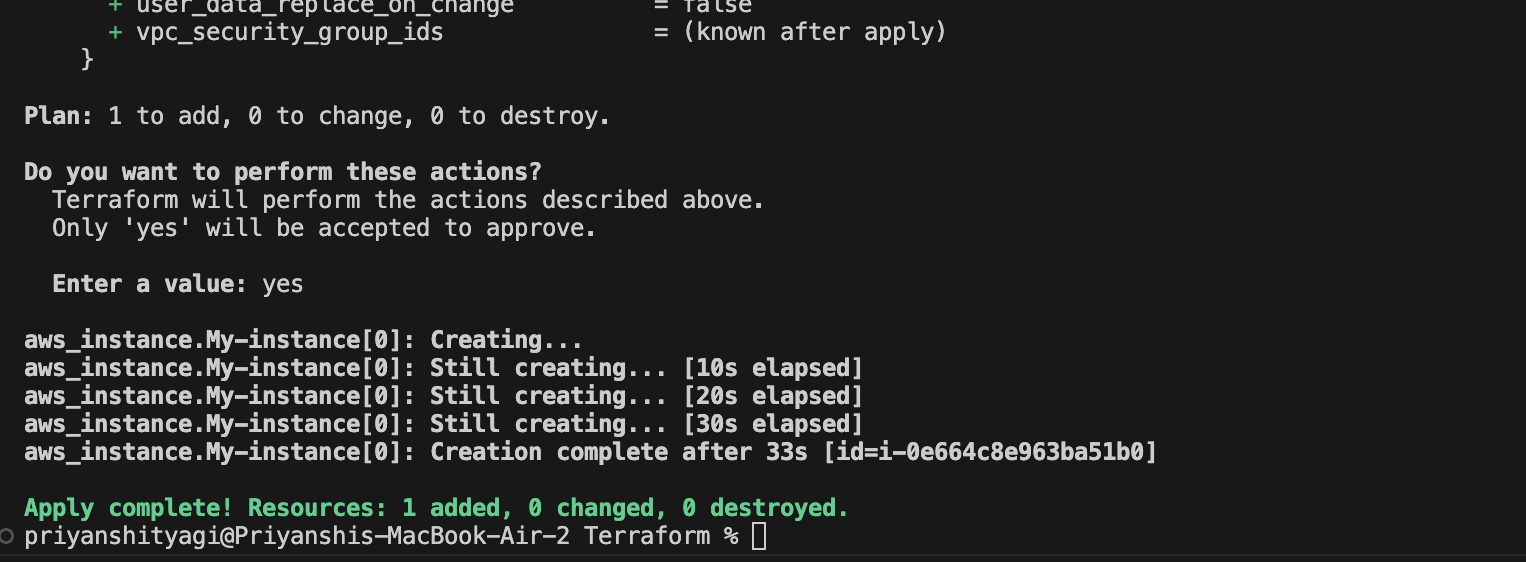
**(instance.tf):**

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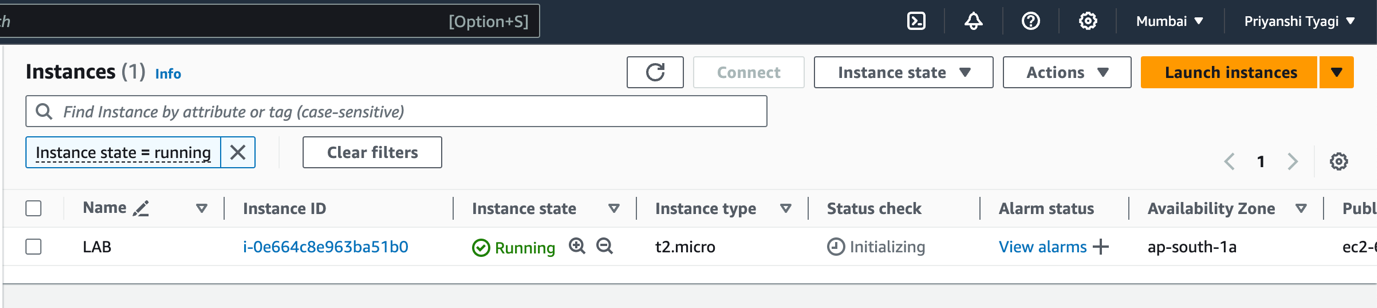
**Step 5: Review Plan:**

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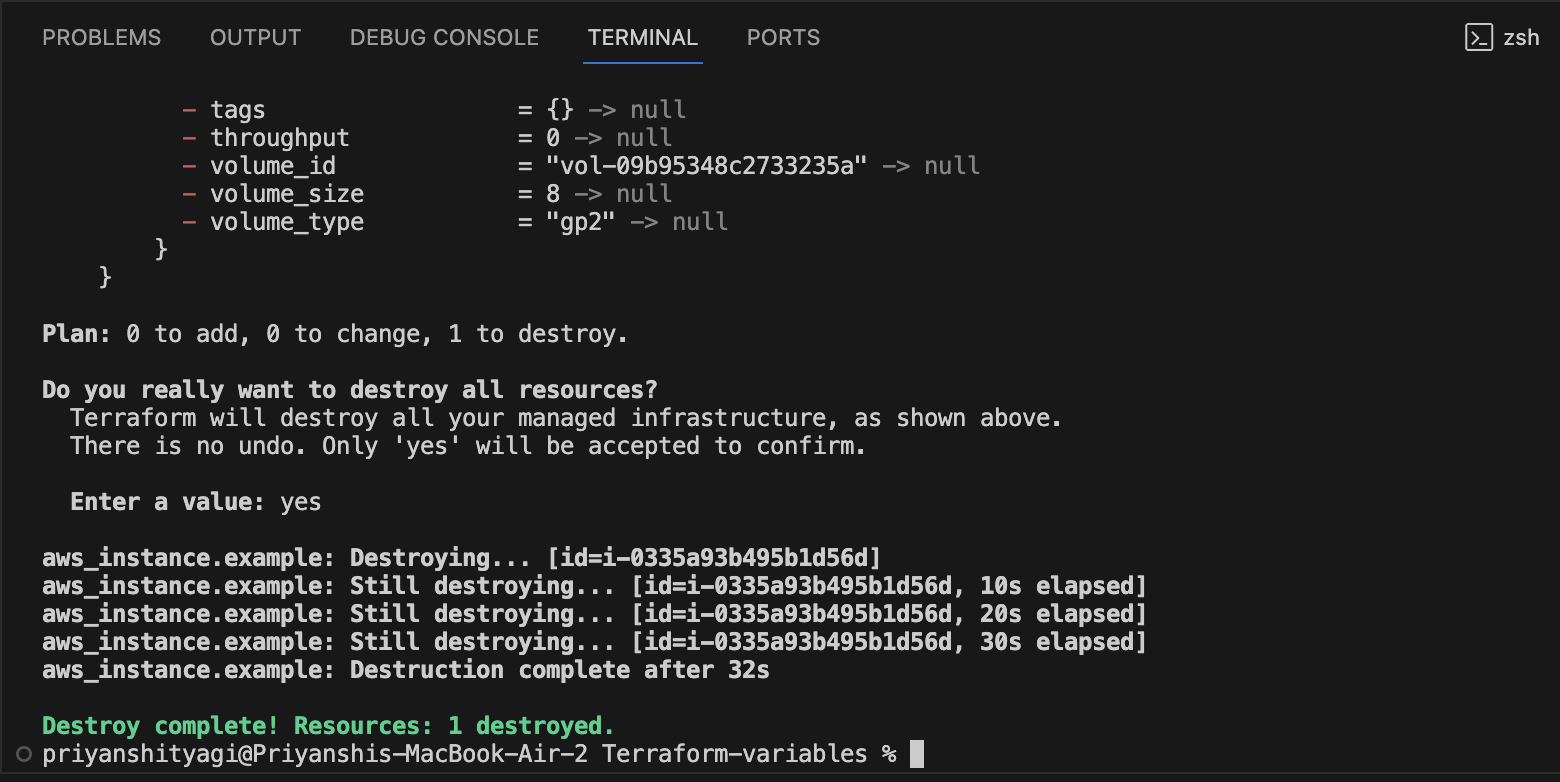
**Step 6: Apply Changes:**

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**Step 7: Verify Resources:**

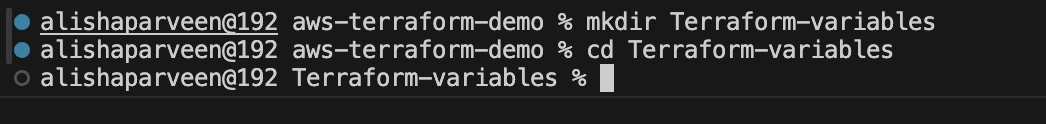
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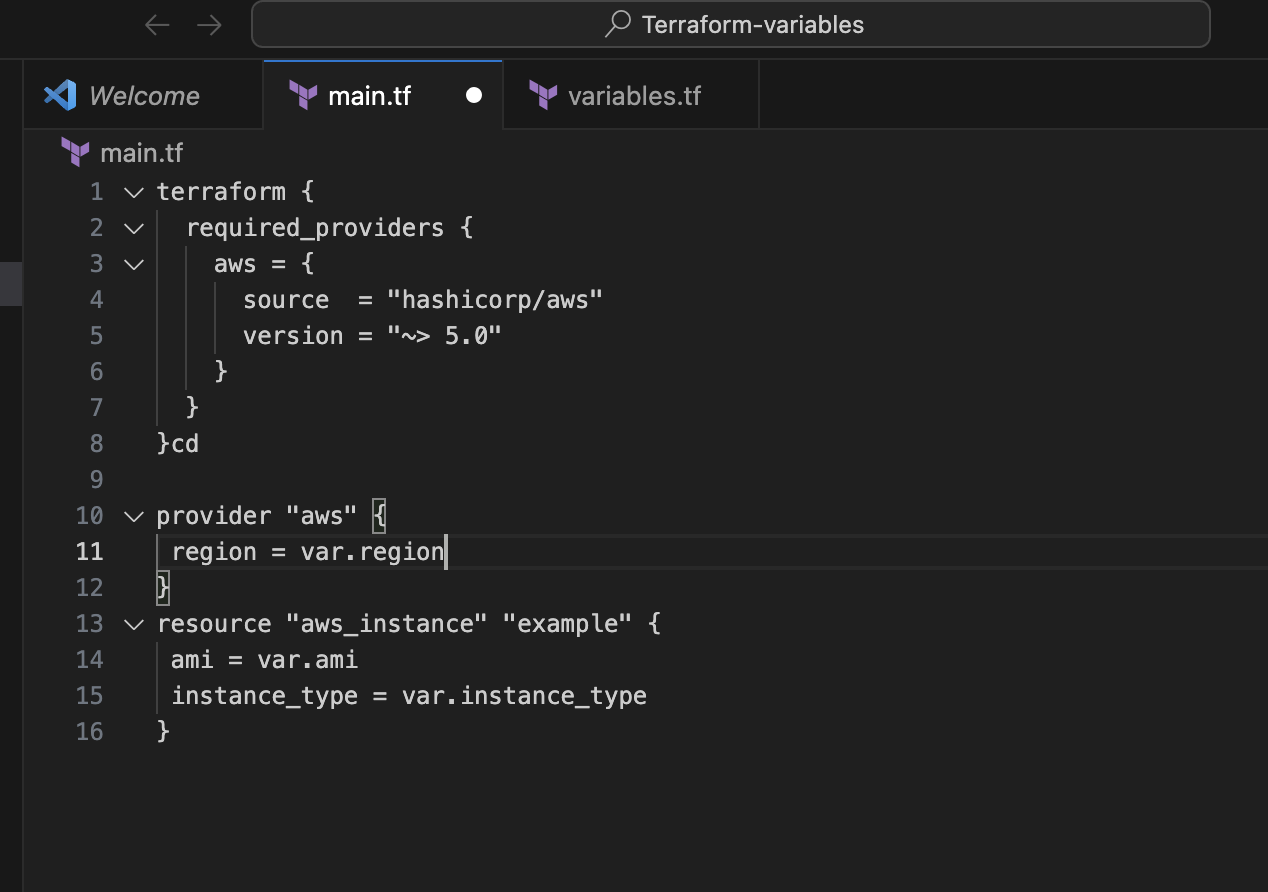
**Step 8: Cleanup Resources:**



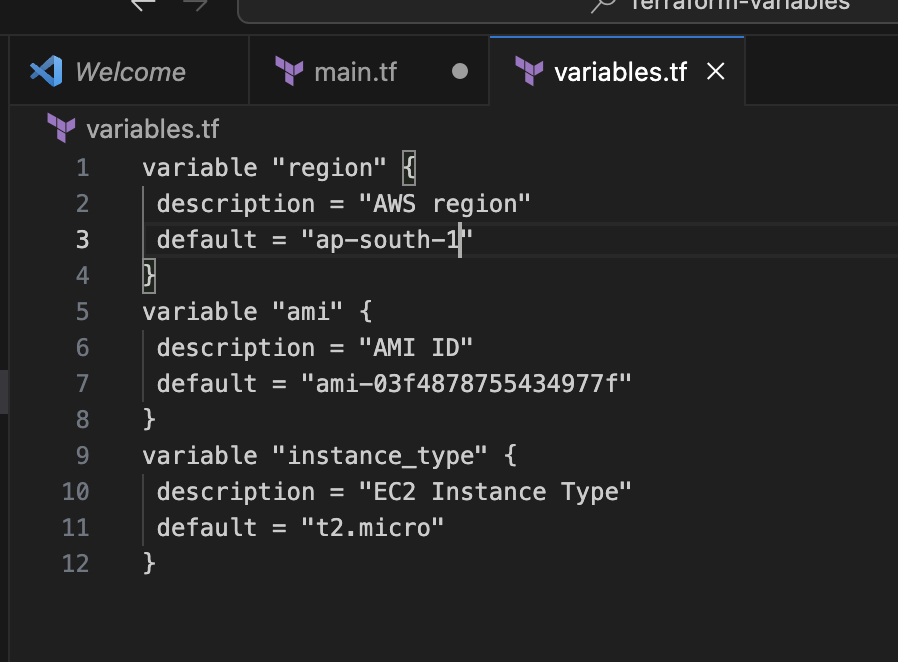
**Lab Exercise 4– Terraform Variables**

**1. Create a Terraform Directory:**

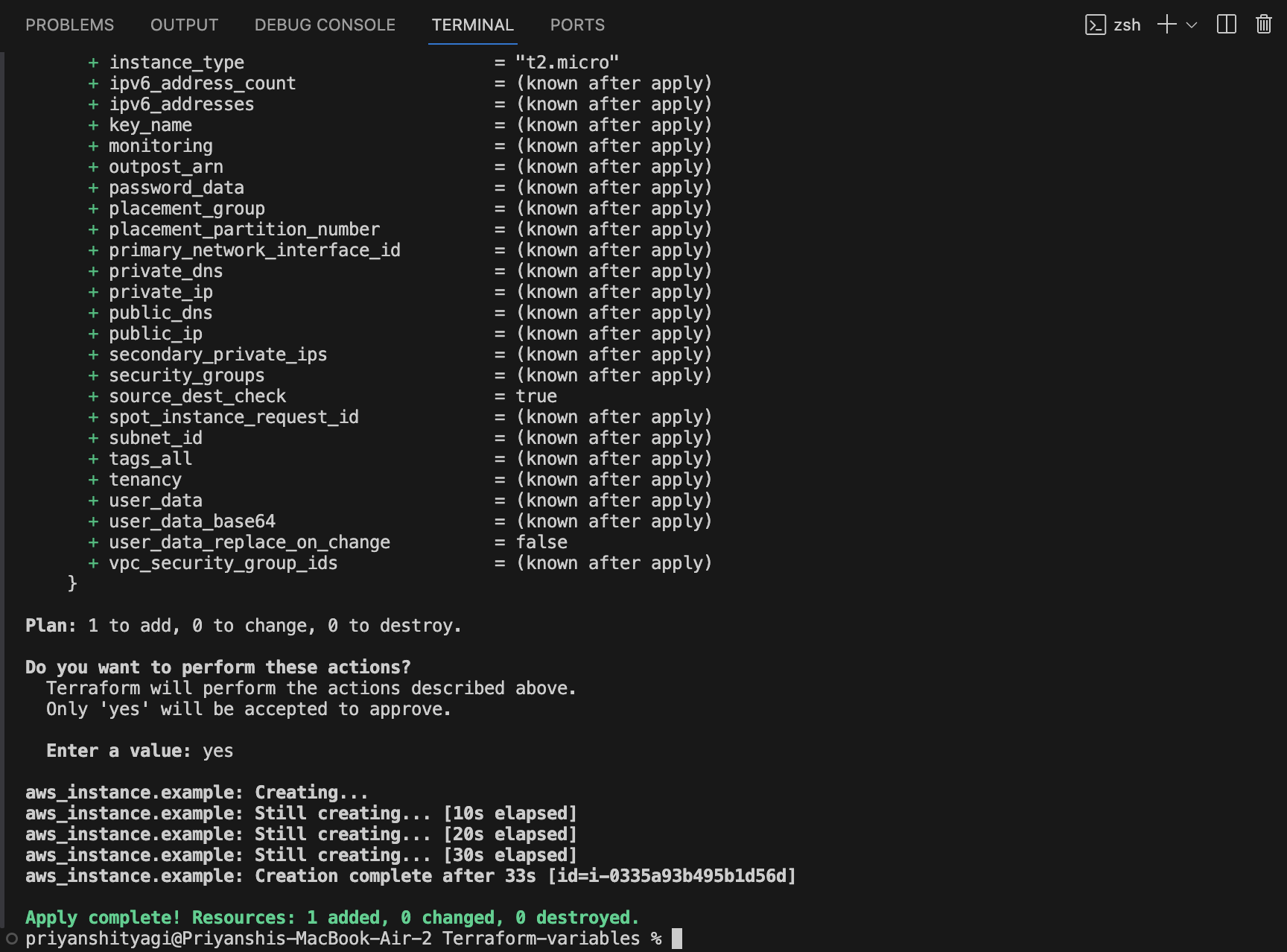
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**2. Create a Terraform Configuration File: **

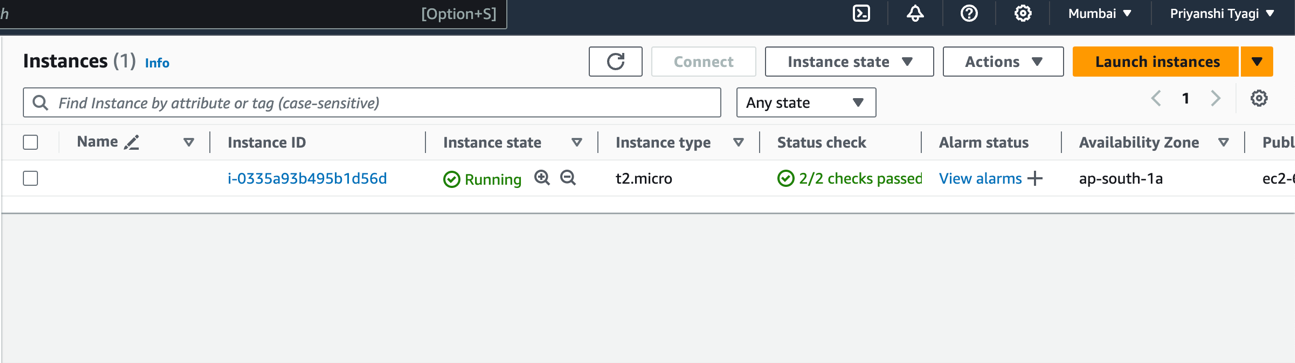
**3. Define Variables:**

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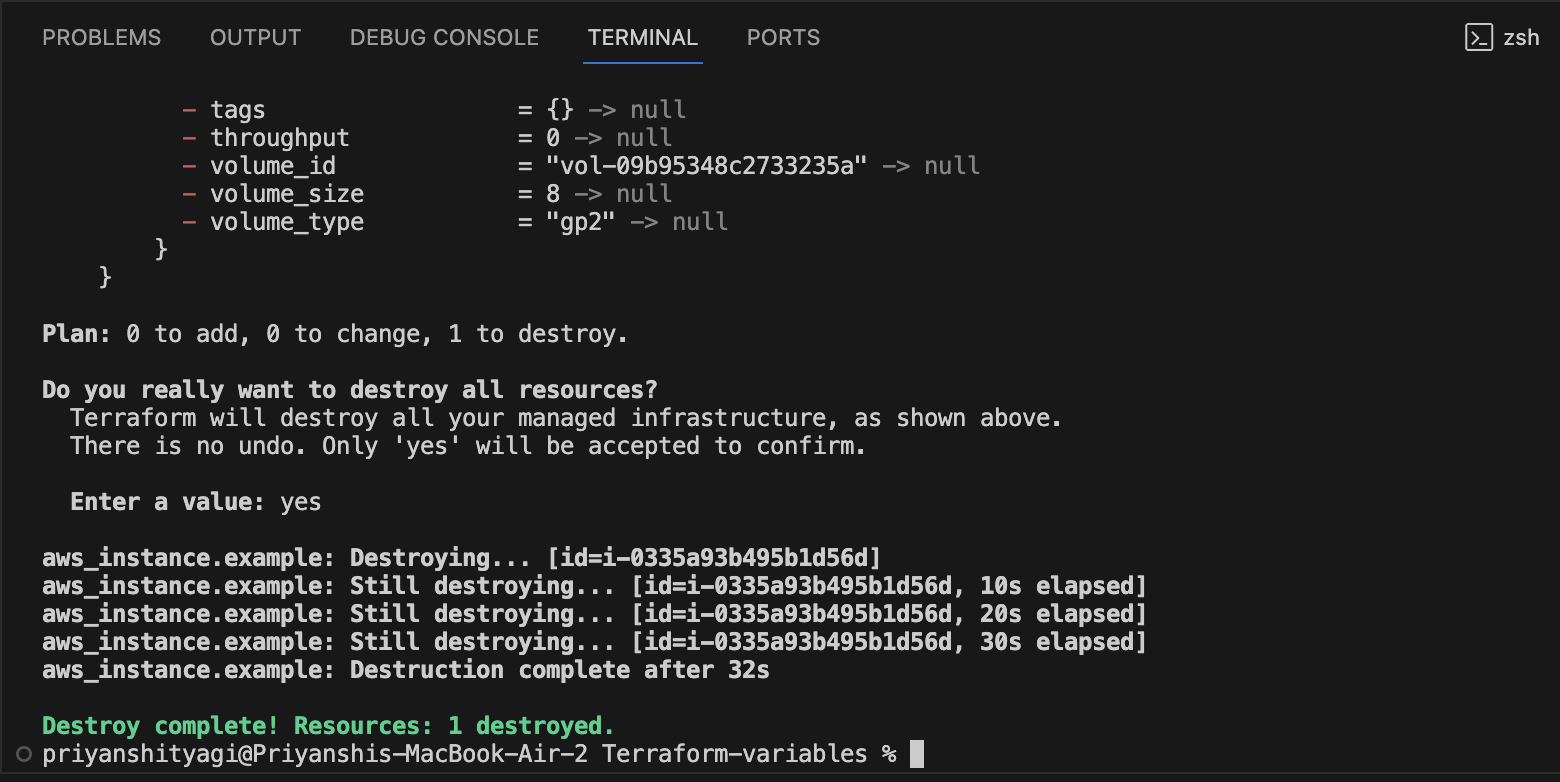
**4. Initialize and Apply:**

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**5. Verify**



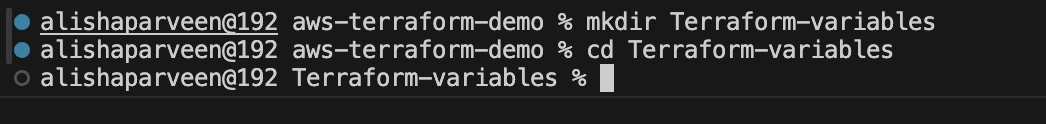
**6. Clean Up:**

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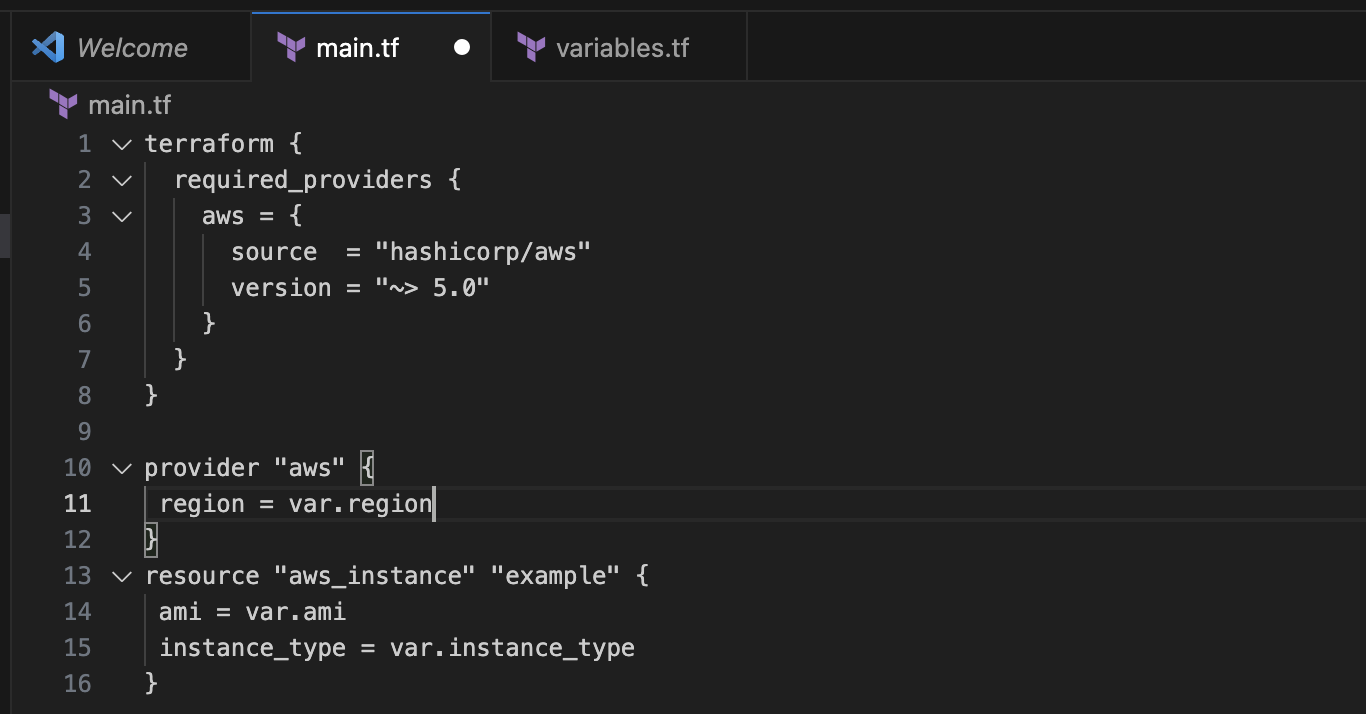
**Lab Exercise 5– Terraform Variables with Command**

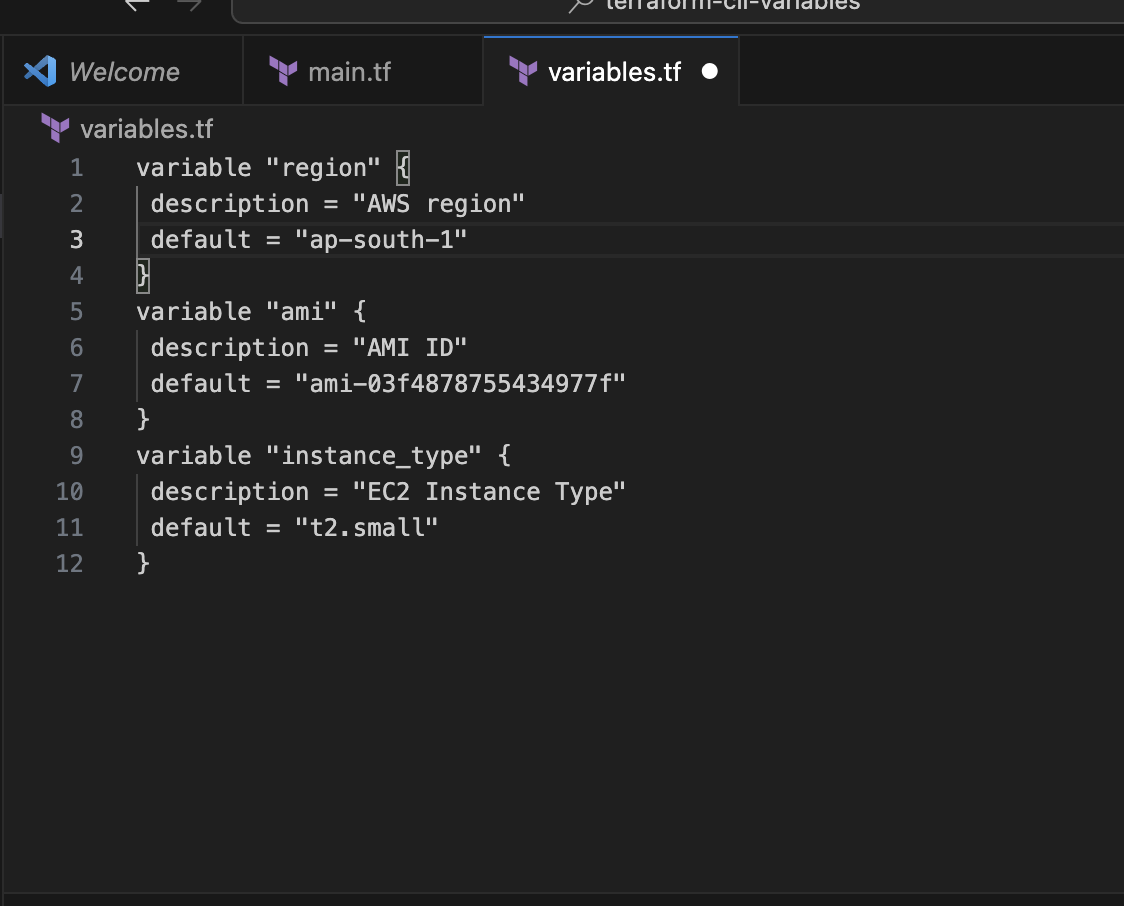
**Line Arguments**

**1. Create a Terraform Directory:**

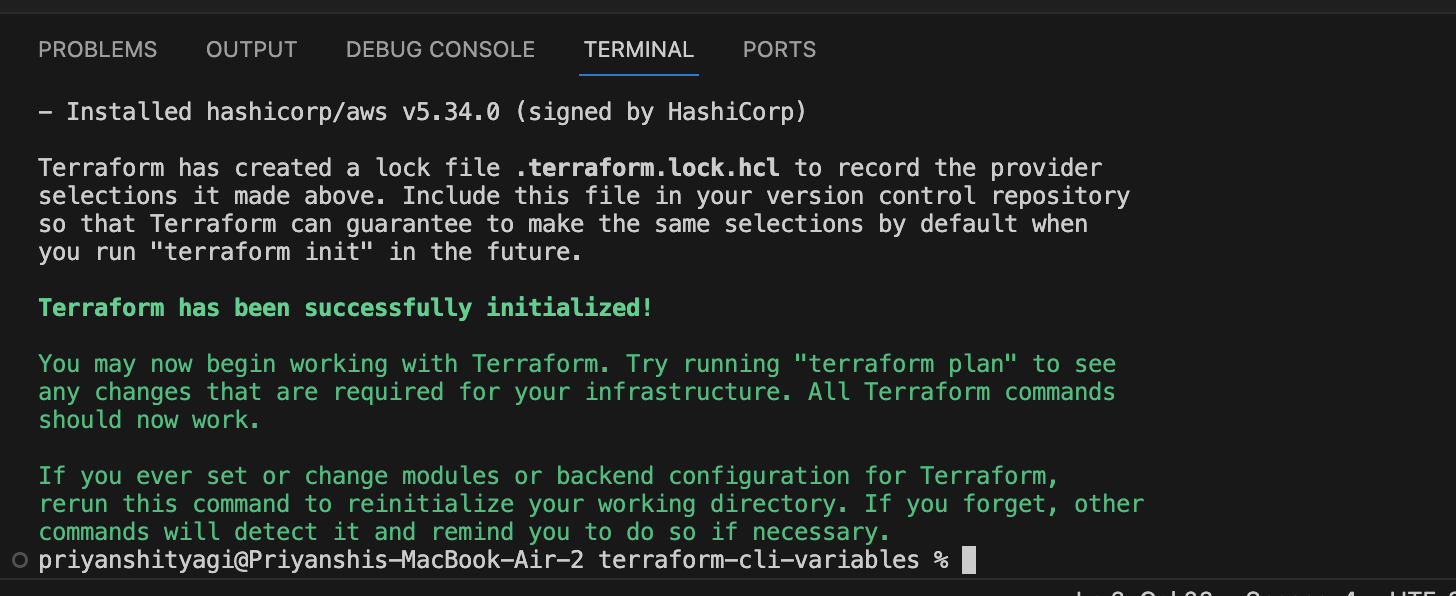
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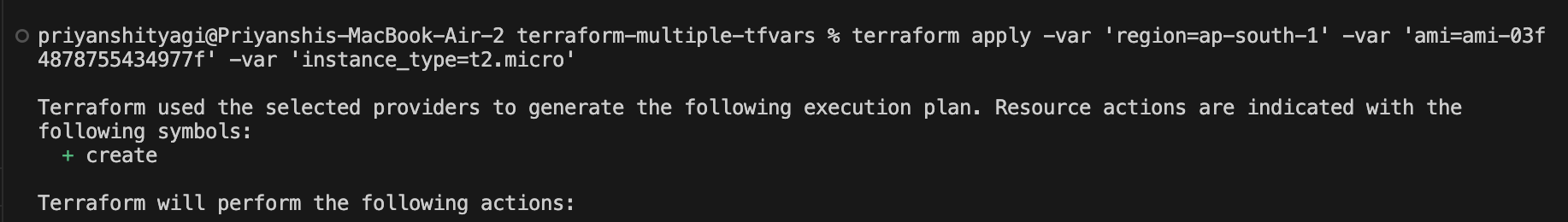
**2. Create Terraform Configuration Files:**

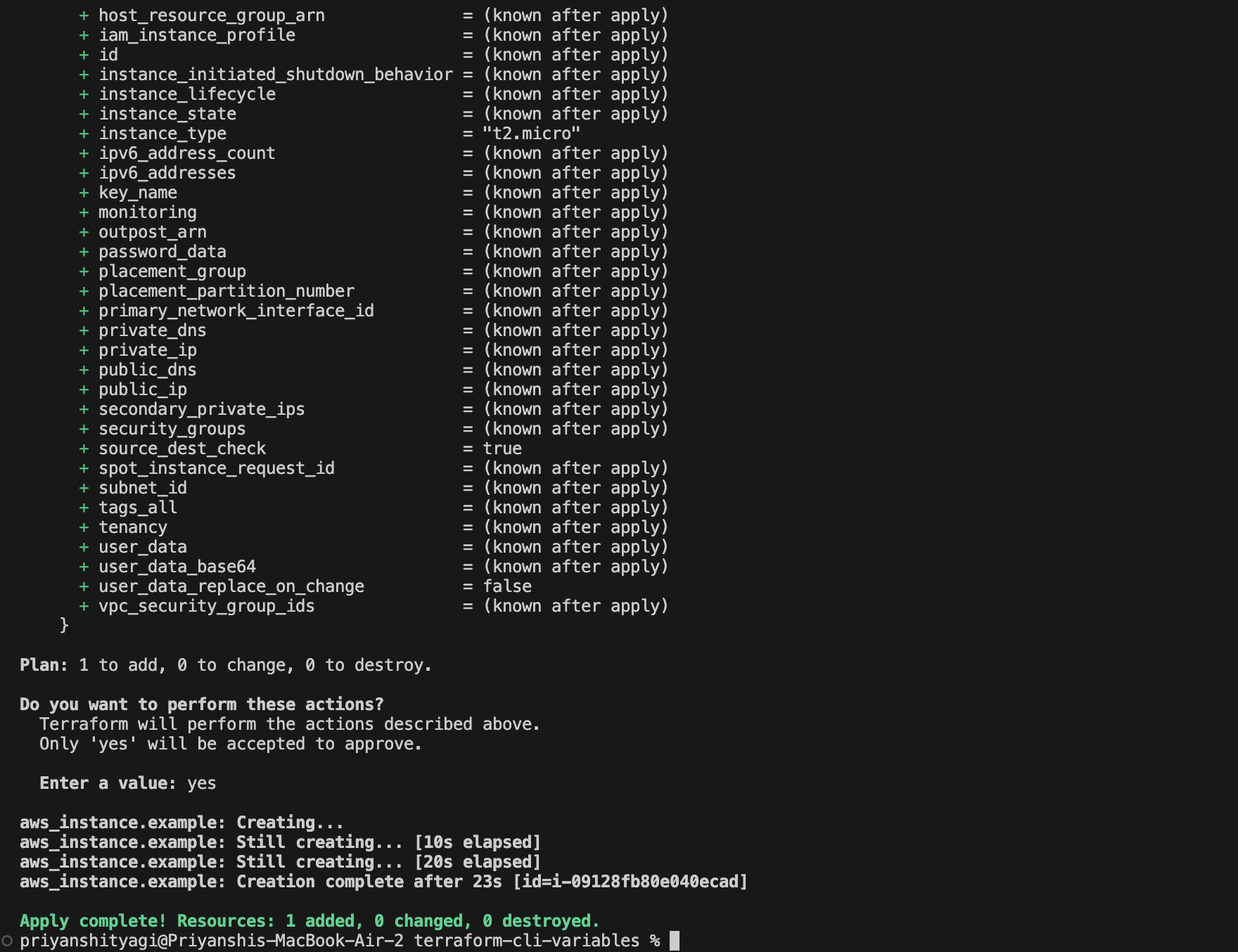
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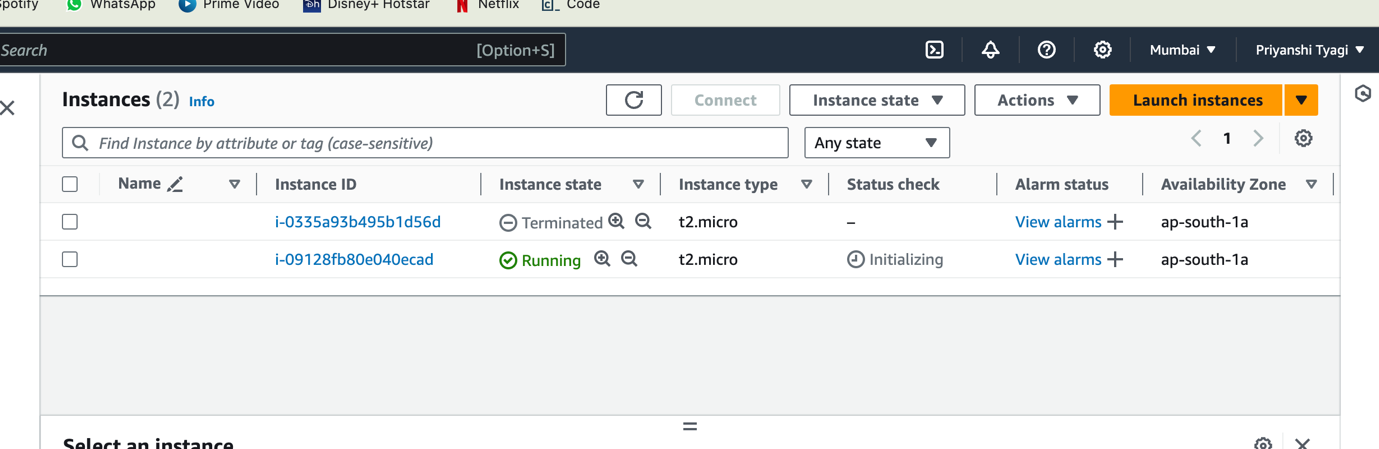
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**3. Use Command Line Arguments:**

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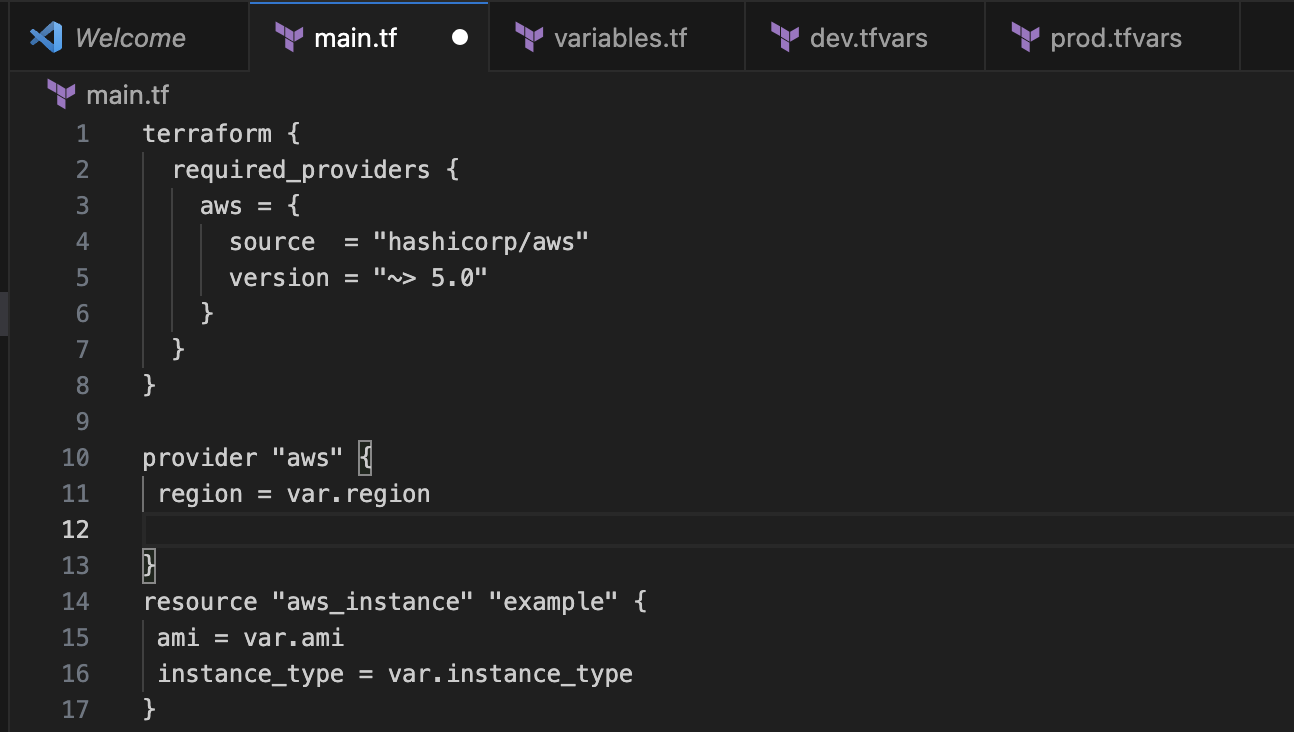
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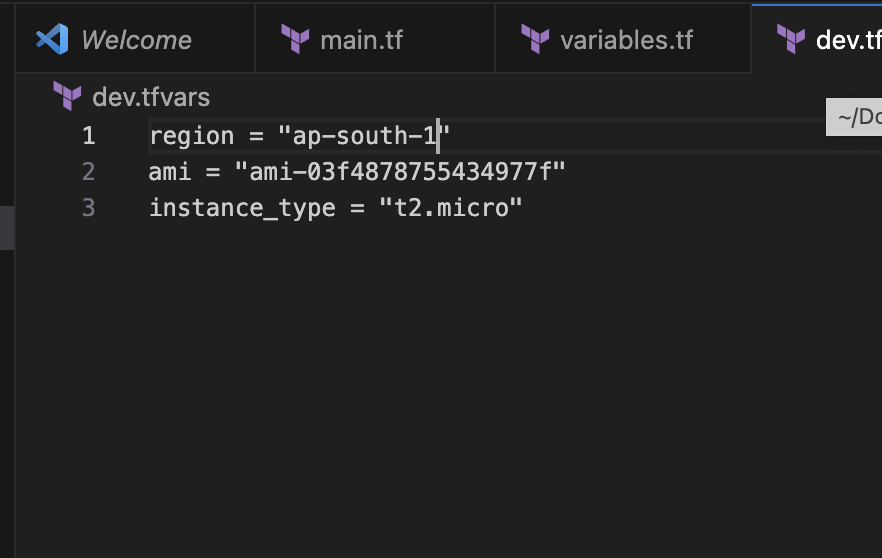
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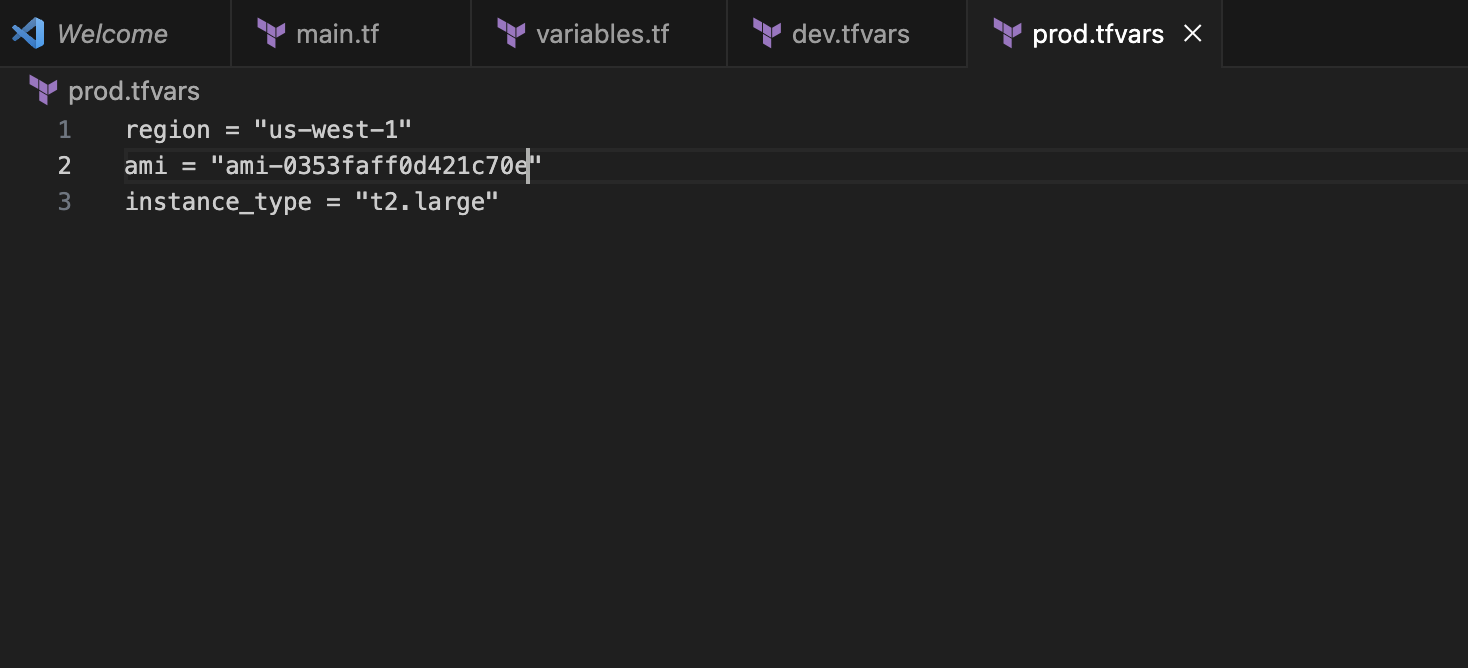
**4. Test and Verify: **

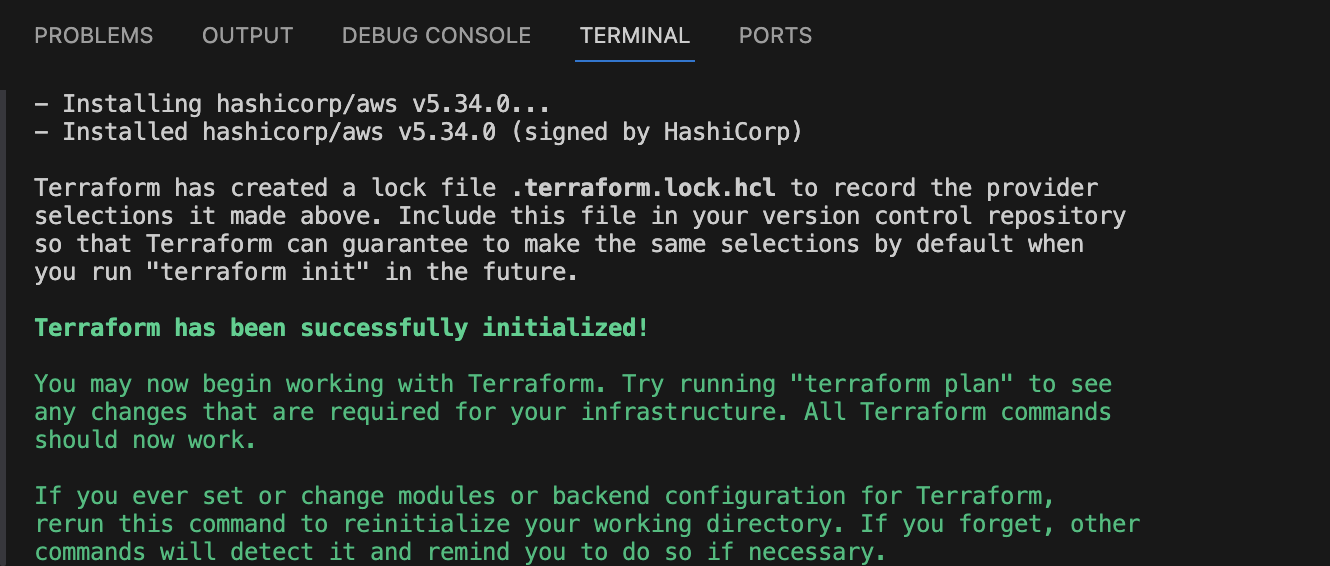
**Lab Exercise 6– Terraform Multiple tfvars Files**

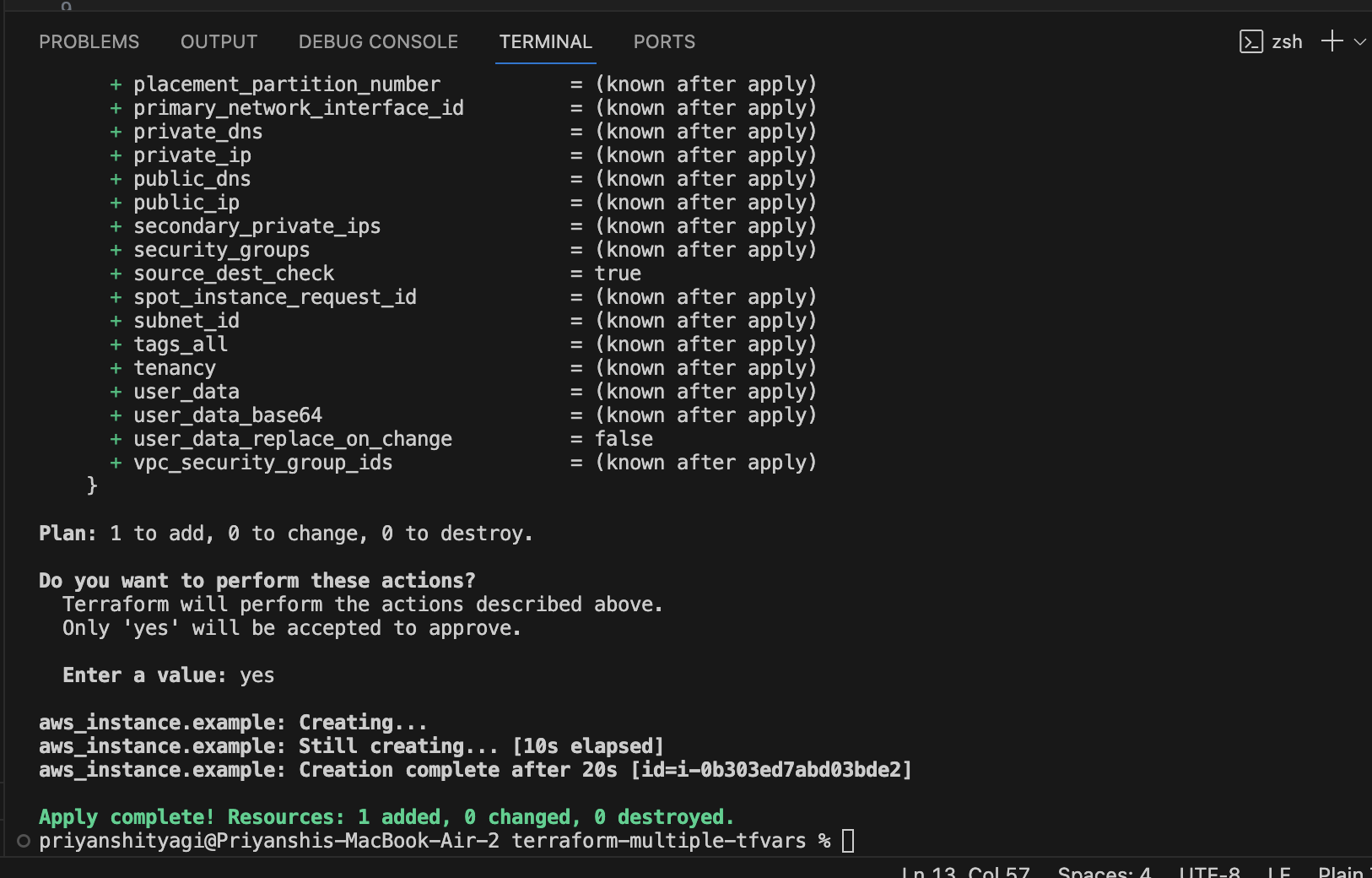
**2. Create Multiple tfvars Files:**

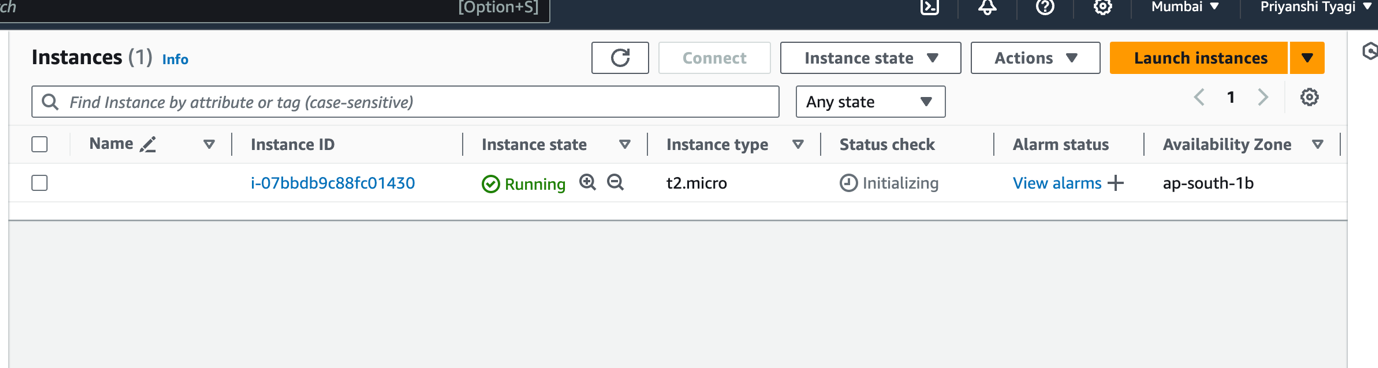
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**3. Initialize and Apply for Dev Environment: **

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**4. Test and Verify: **