# Terraform - basic syntax

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## **Tutorial**

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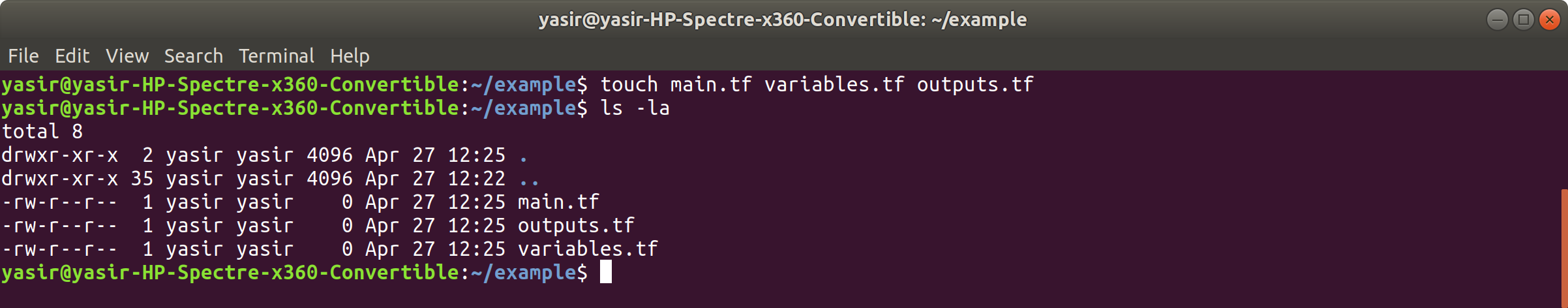
**Azure**

create example directory and move to it

**$ mkdir example && cd $\_**

create files main.tf variables.tf outputs.tf

**$ touch main.tf variables.tf outputs.tf**



Define the provider and resource to use, so edit the main.tf file

**$ vim main.tf**

add the following

# Configure the Azure Provider

provider "azurerm" {

version = "=2.0.0"

features {}

}

# Create a resource group

resource "azurerm\_resource\_group" "example" {

name = "example-rg"

location = "East US 2"

}

# Create a virtual network within the resource group

resource "azurerm\_virtual\_network" "example" {

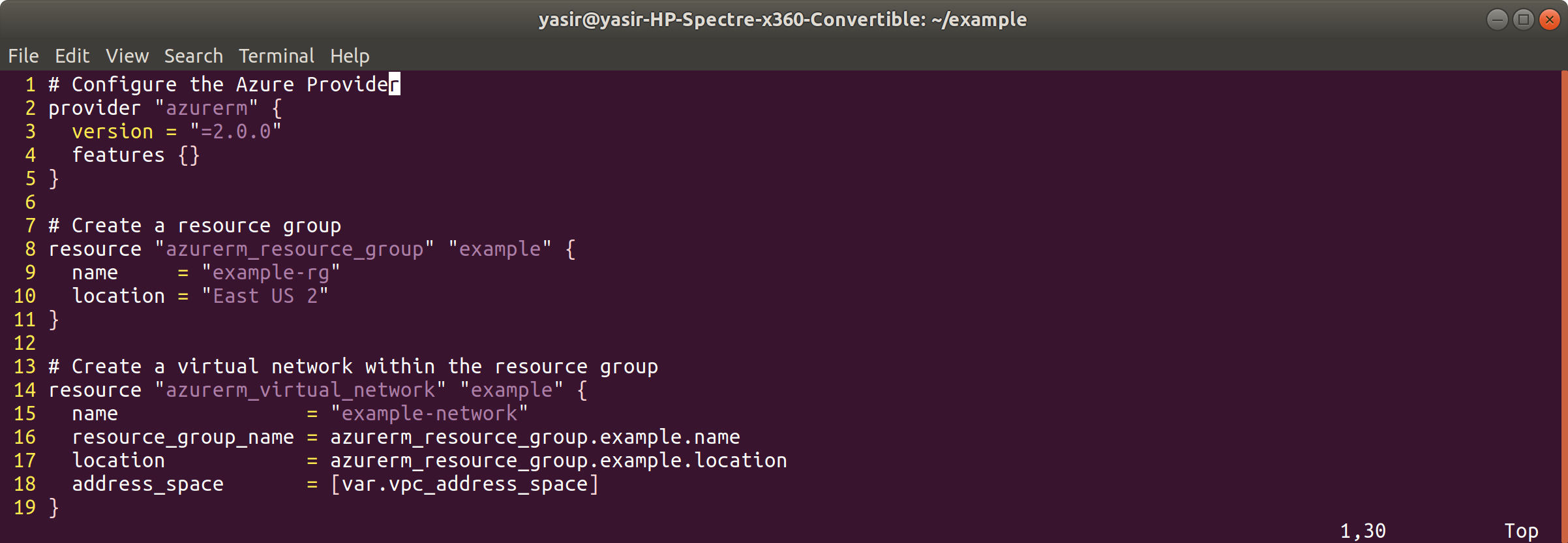
name = "example-network"

resource\_group\_name = azurerm\_resource\_group.example.name

location = azurerm\_resource\_group.example.location

address\_space = [vpc\_address\_space]

}



define a variable

**$ vim variables.tf**

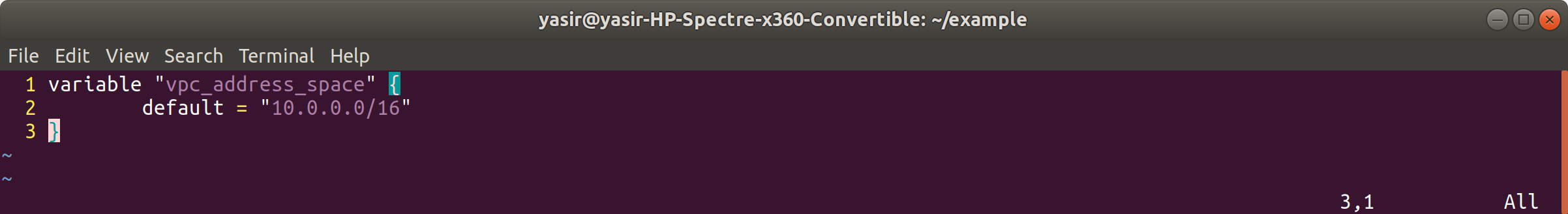
type in the following

variable “vpc\_address\_space” {

default = “10.0.0.0/16”

}

**$ vim variable.tf**



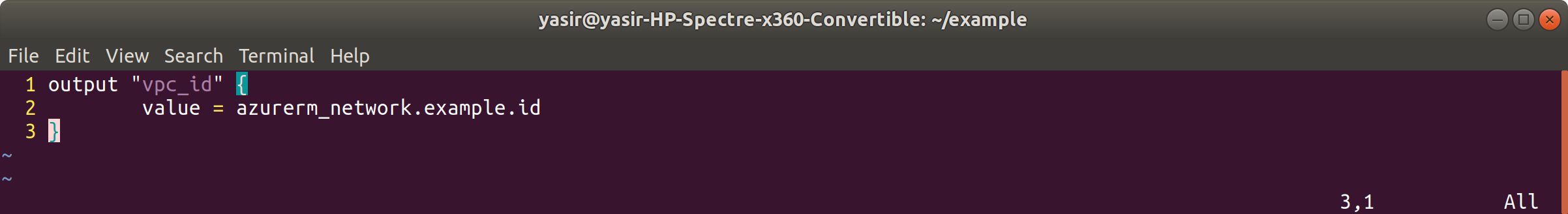
Edit output file, type in the following

output “vpc\_id” {

value = azurerm\_network.example.id

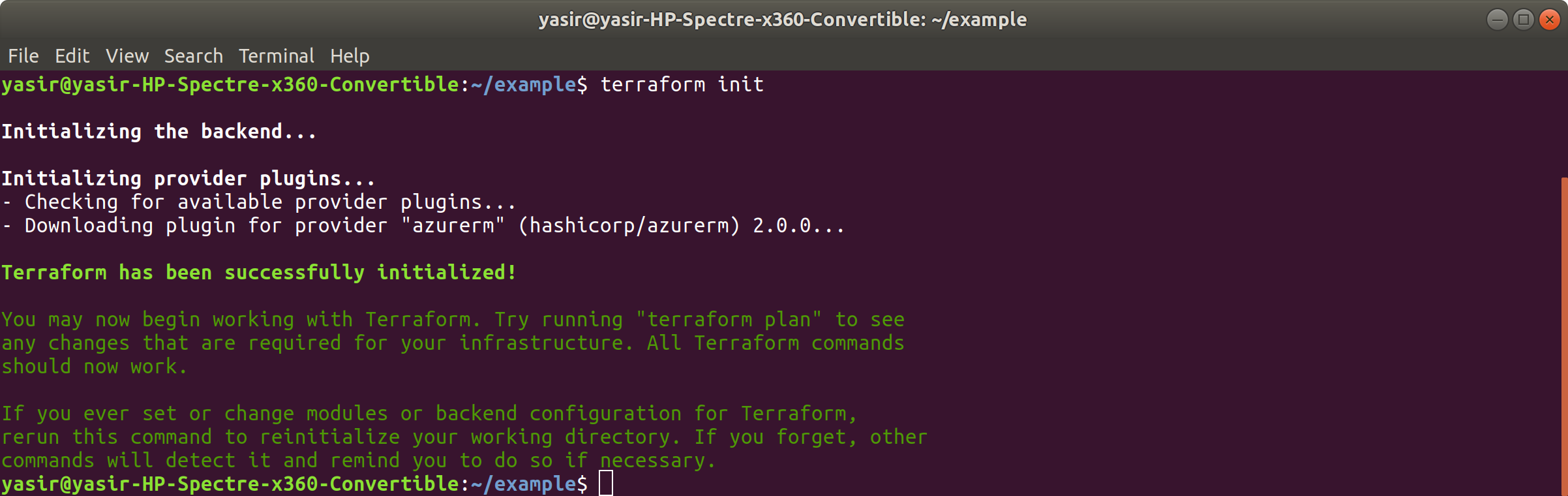
}

**$ vim outputs.tf**



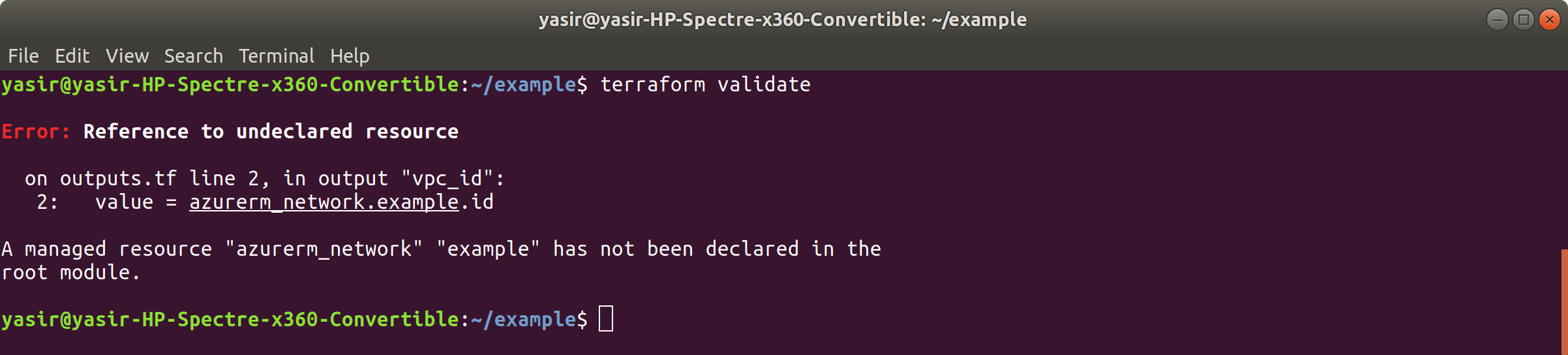
Initialise terraform

**$ terraform init**

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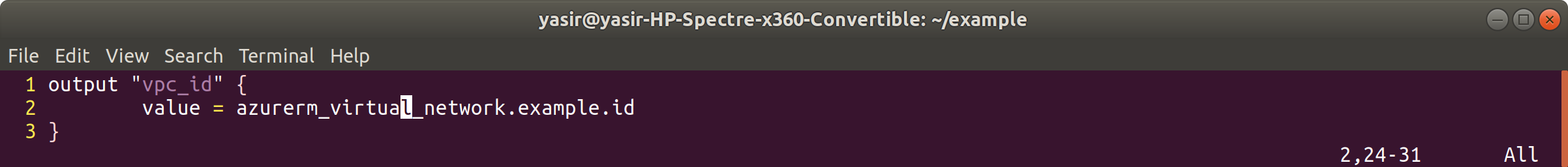
Now validate

**$ terraform validate**

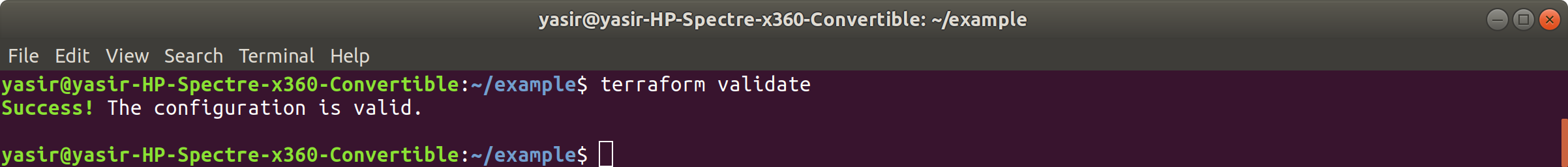
****

in outputs.tf file change “azurerm\_network” to “azurerm\_virtual\_network”

**$ vim outputs.tf**

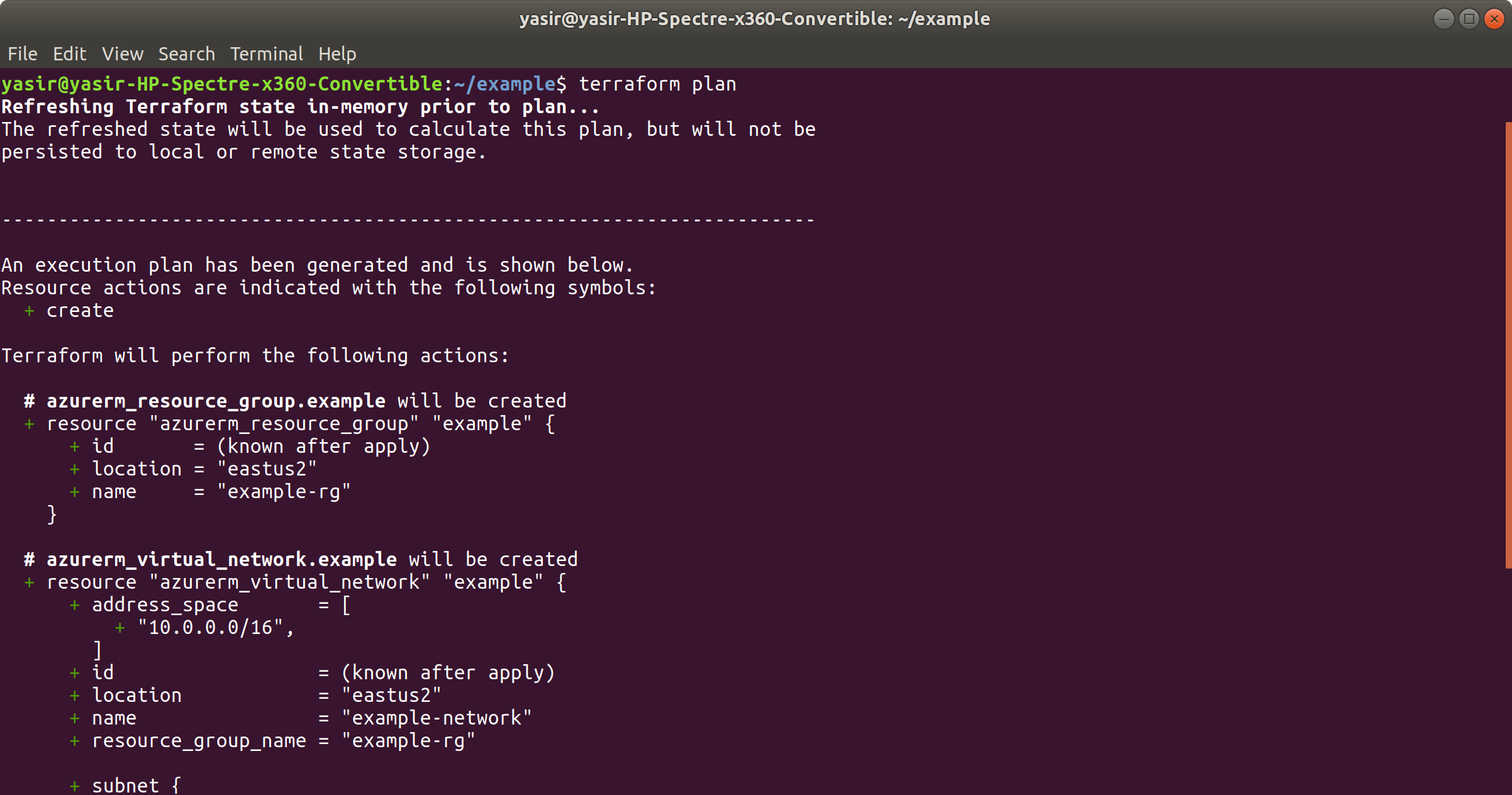


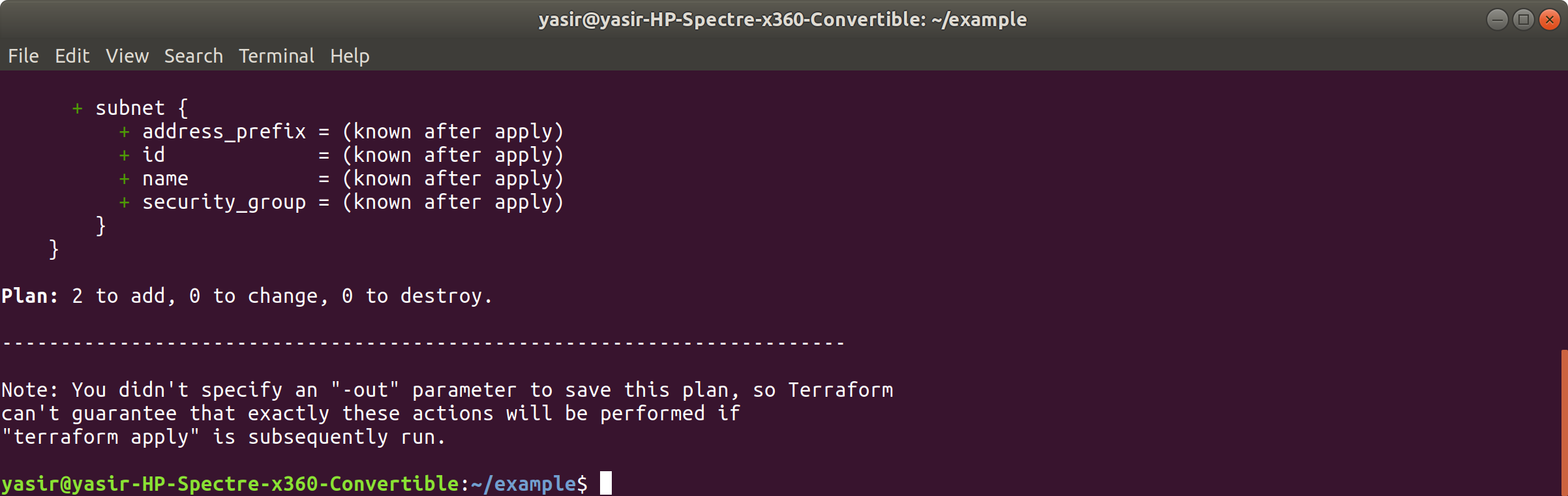
**$ terraform validate**

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Now list the plan

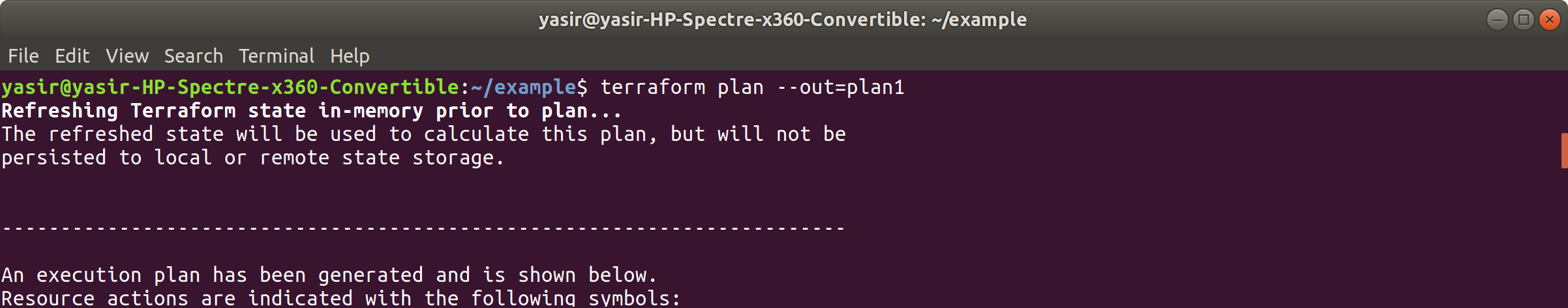
**$ terraform plan**

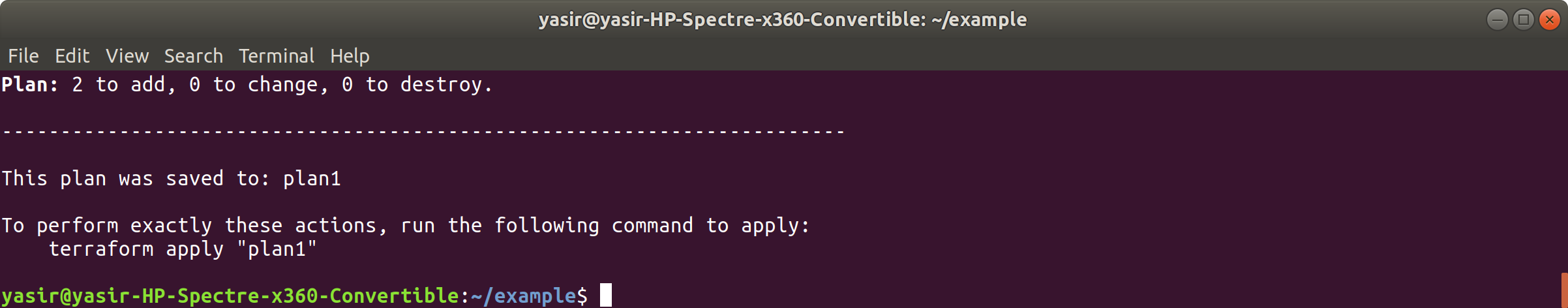
****

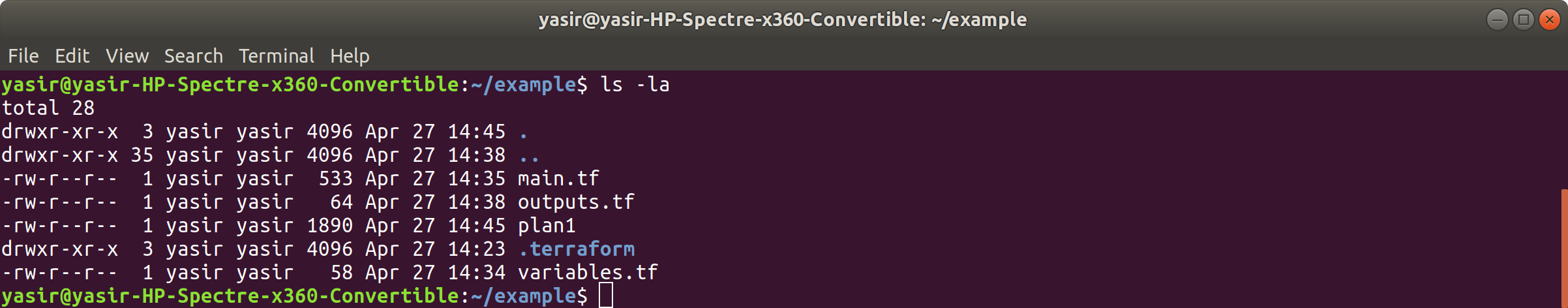
****

Save the plan to a file

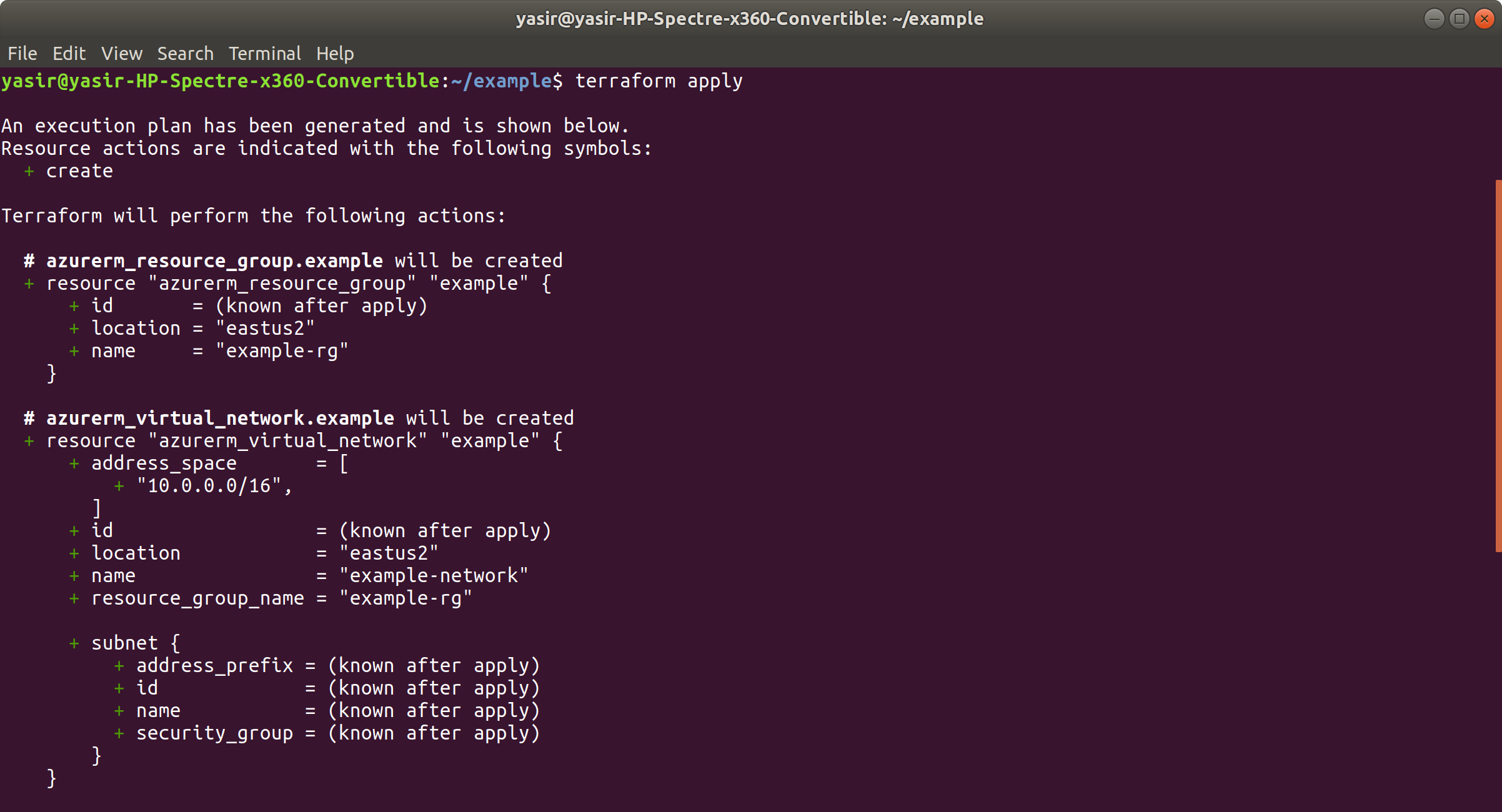
**$ terraform plan --out=plan1**

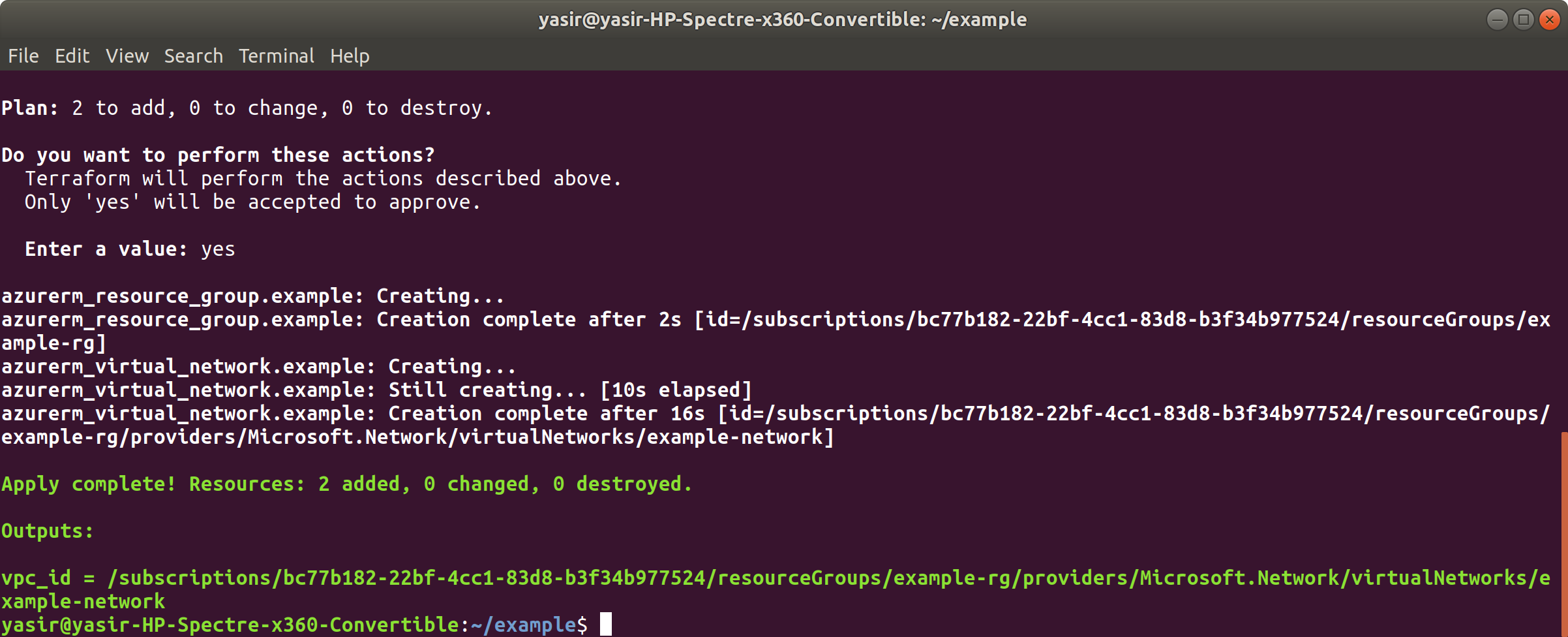
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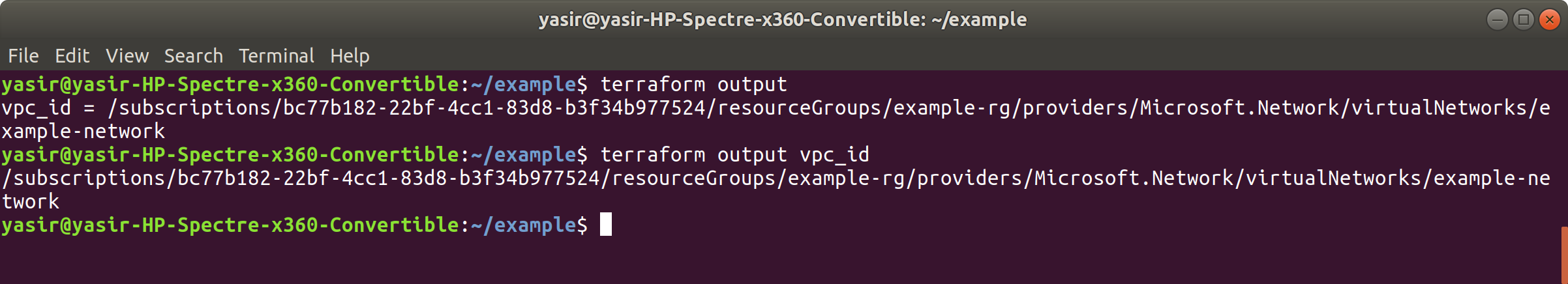
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**$ terraform apply**

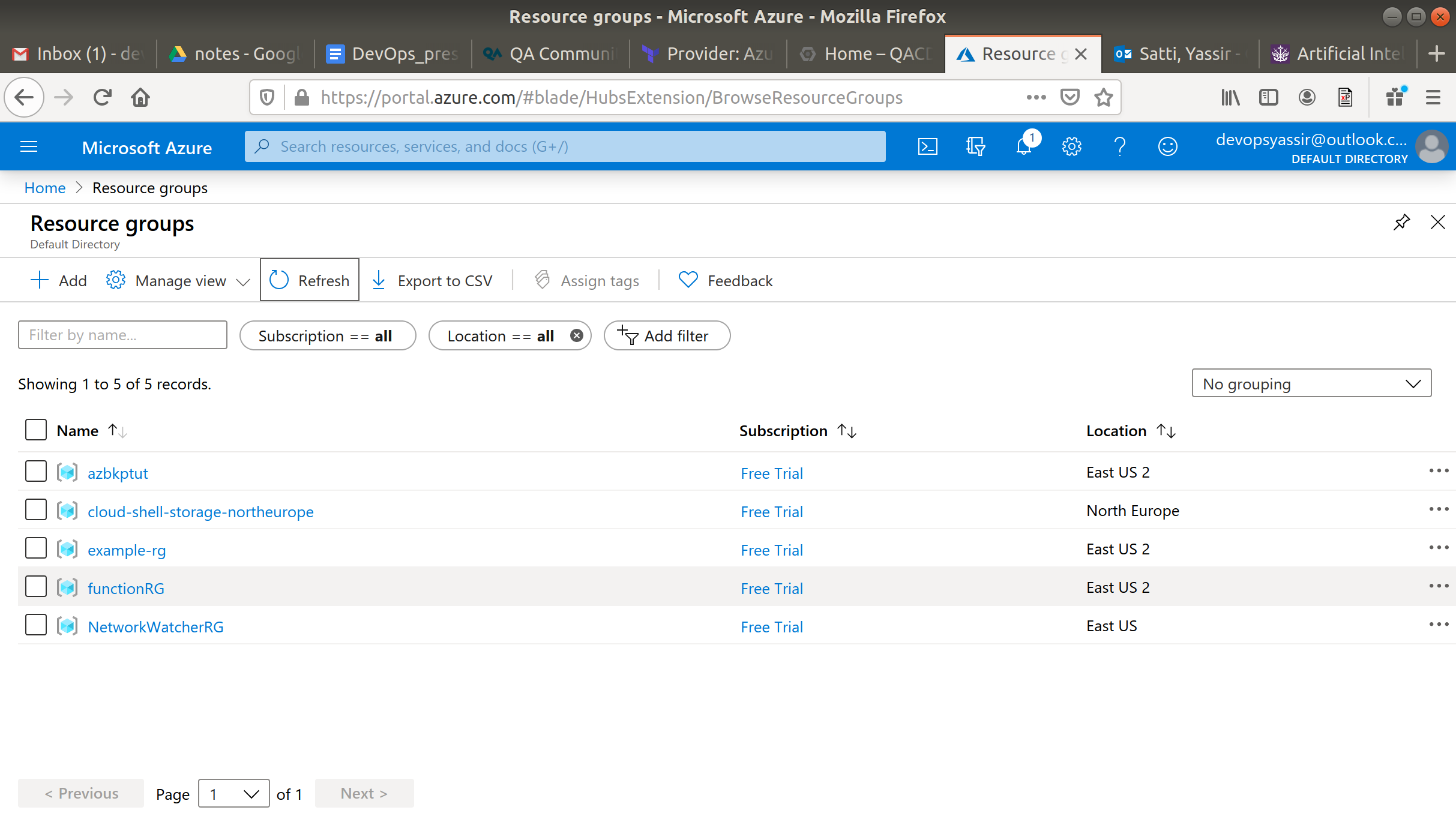
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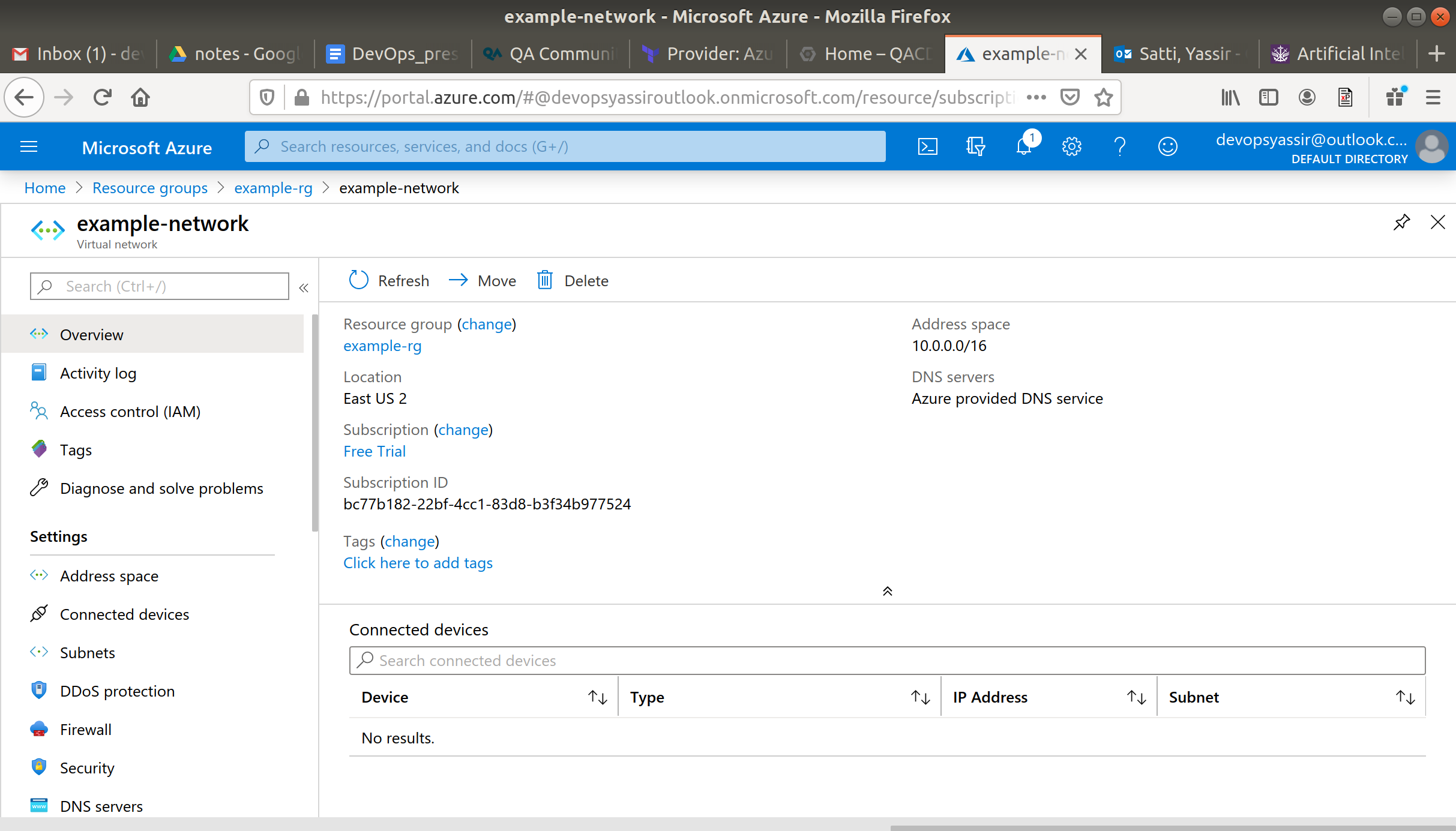
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**$ terraform output vpc\_id**

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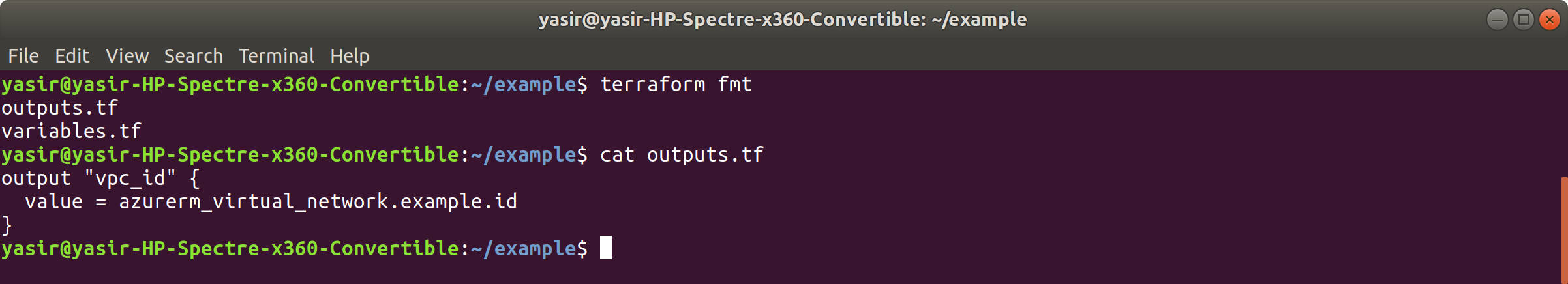
check on Azure portal

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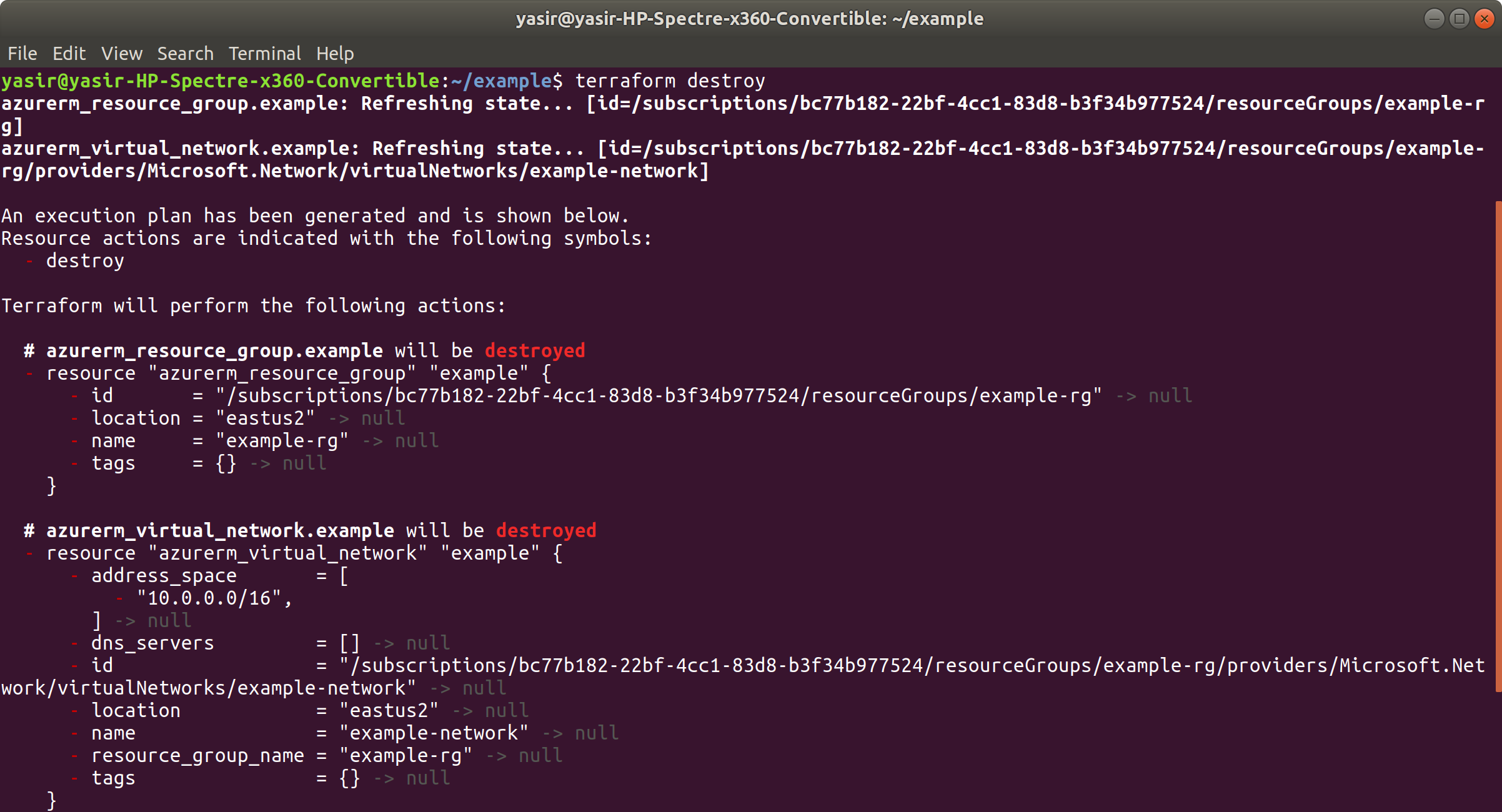
You can format the files, for example, to confirm to Python convention of indentation

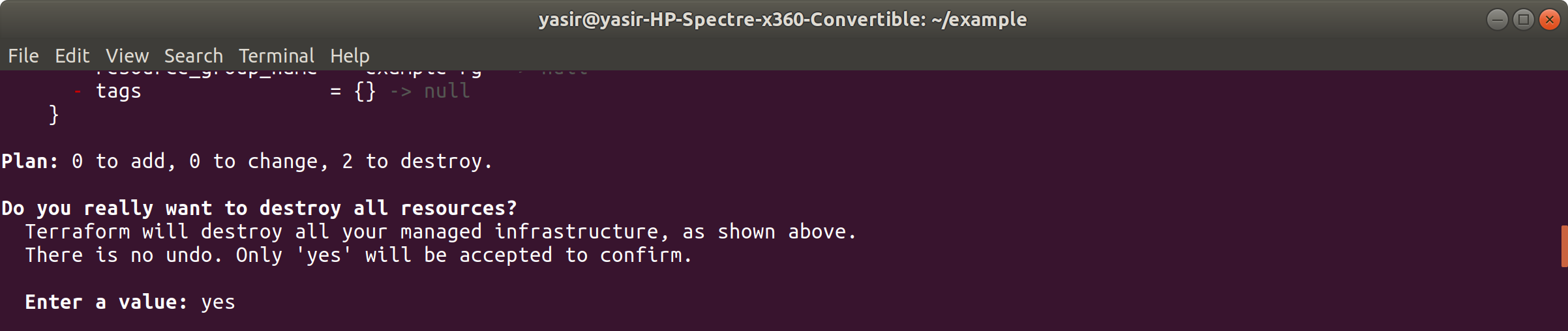
**$ terraform fmt**

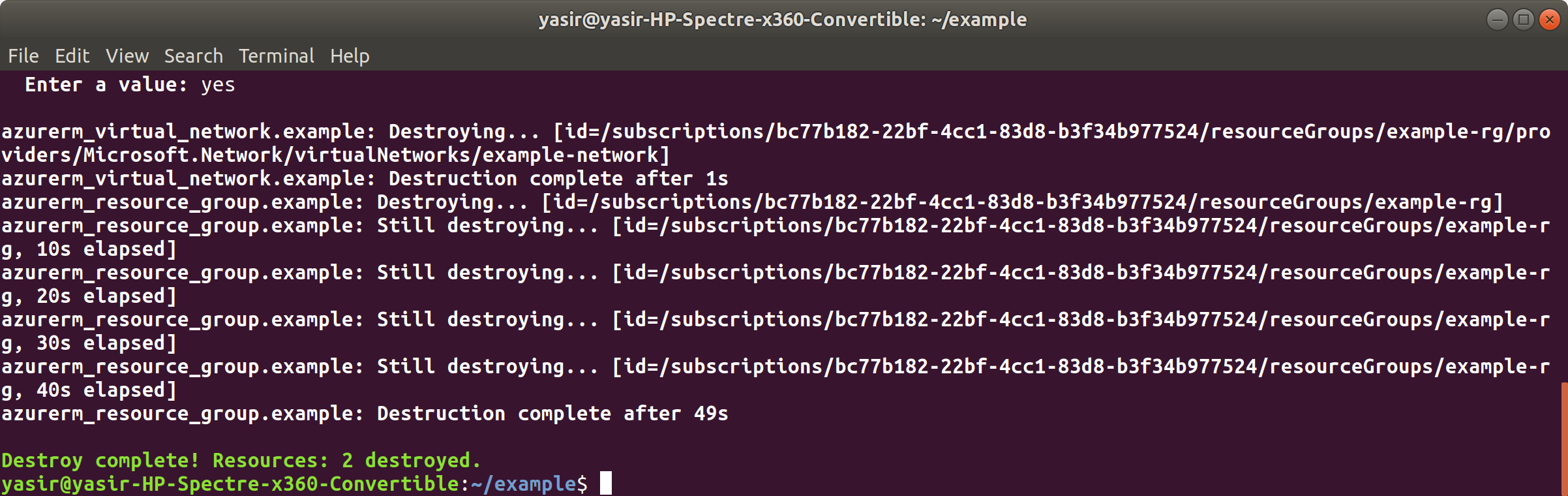
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**Clean up**

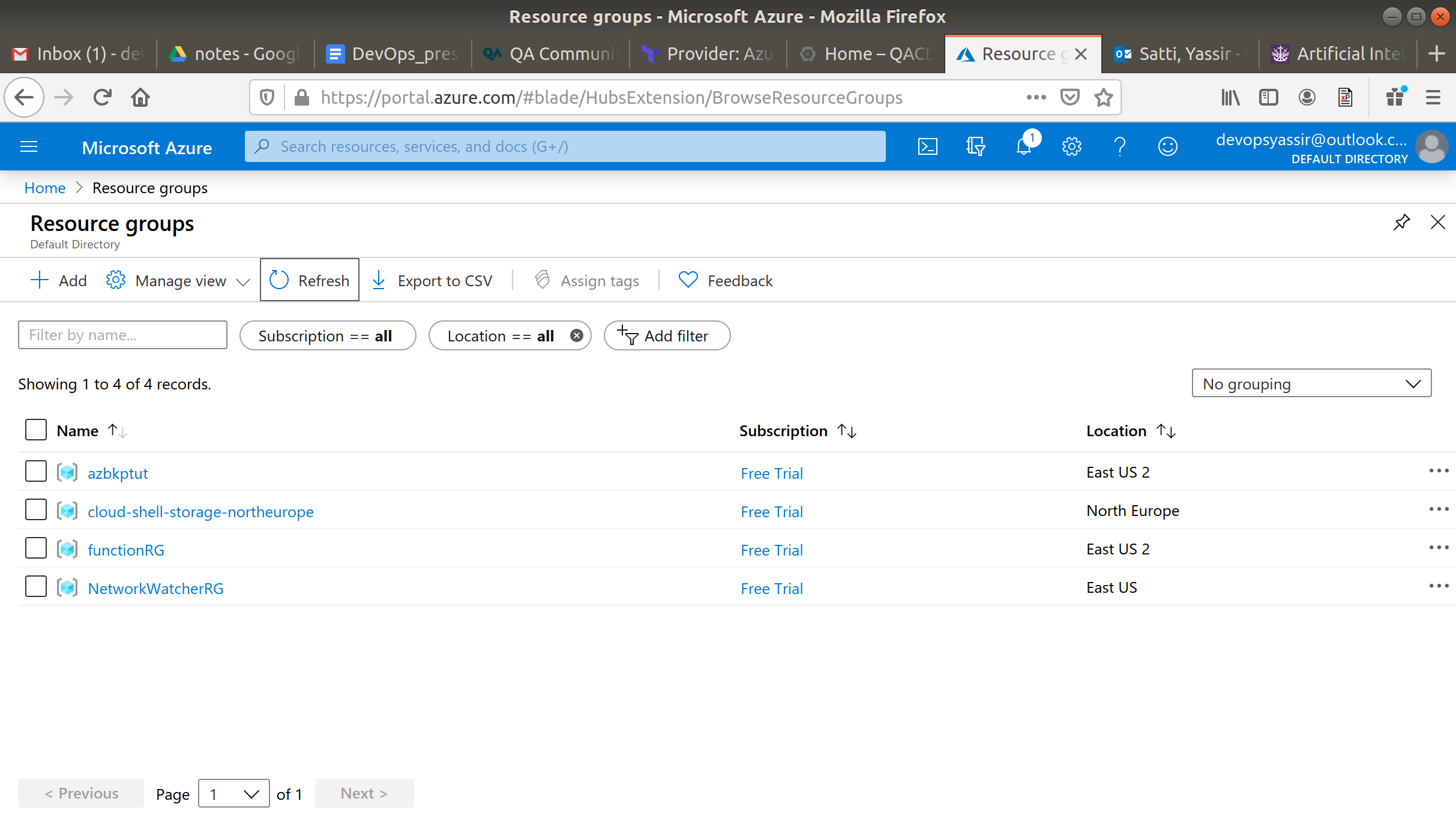
**$ terraform destroy**

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check on Azure portal

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