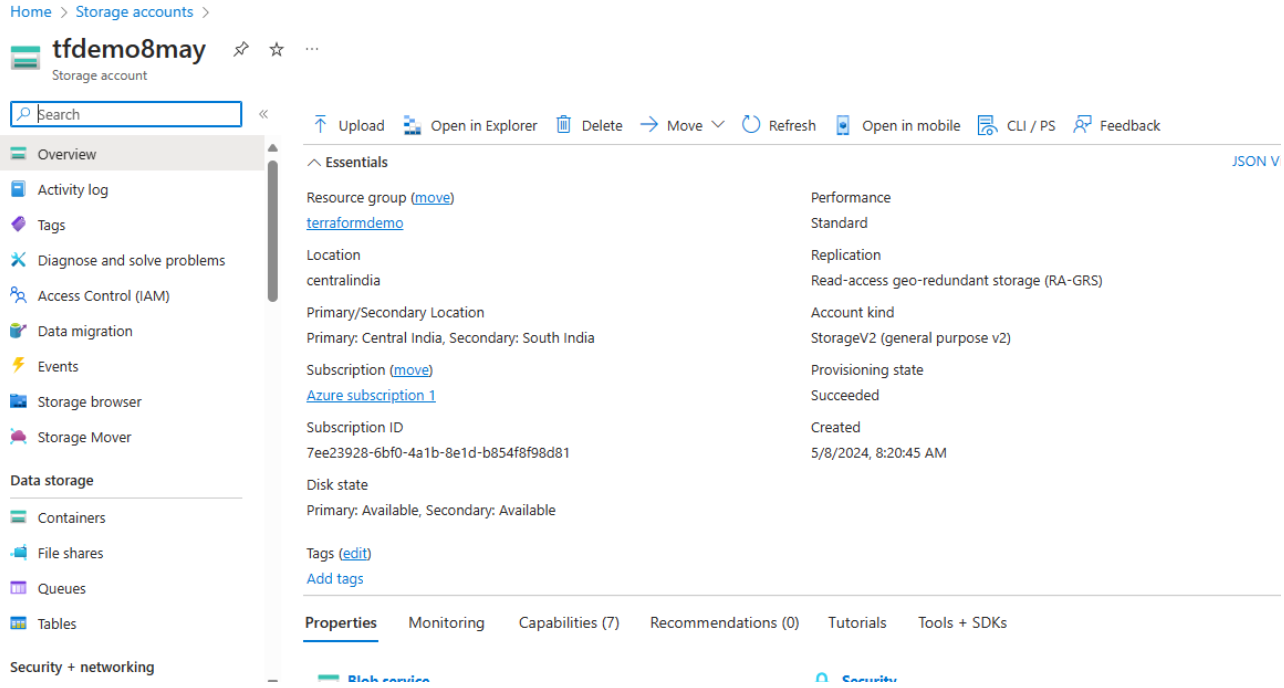
Terraform contd

- Lets add the storage account declaration

```
terraform {
  required_providers {
    azurerm = {
      source  = "hashicorp/azurerm"
      version = "3.102.0"
    }
  }
}

provider "azurerm" {
  features {

  }
}

resource "azurerm_resource_group" "storage" {
  name     = "storage"
  location = "Central India"
}

resource "azurerm_storage_account" "example" {
  name                     = "fromtfmay24"
  resource_group_name      = azurerm_resource_group.storage.name
  location                 = azurerm_resource_group.storage.location
  account_tier             = "Standard"
  account_replication_type = "GRS"

  tags = {
    environment = "staging"
  }
}
```

- Now validata, fmt and apply to create infra



- Refer Here for the changeset
- Now destroy the resources

Hashicorp Configuration Language

- Block syntax

```
block "name" {
    arg1 = value1
    ..
    argn = valuen
}
```

- Provider Block: This defines where to create resources. Refer Here

```
provider "<name>" {
    arg1 = value1
    ..
    argn = valuen
}
```

- Terraform block: Refer Here for official docs, we use terraform block to specify which provider version can be used and also which terraform version can be used
- Version constraints Refer Here
- Datatypes: Refer Here
- Resource block: Refer Here for official docs

```
resource "<type>" "<name>" {

}
```

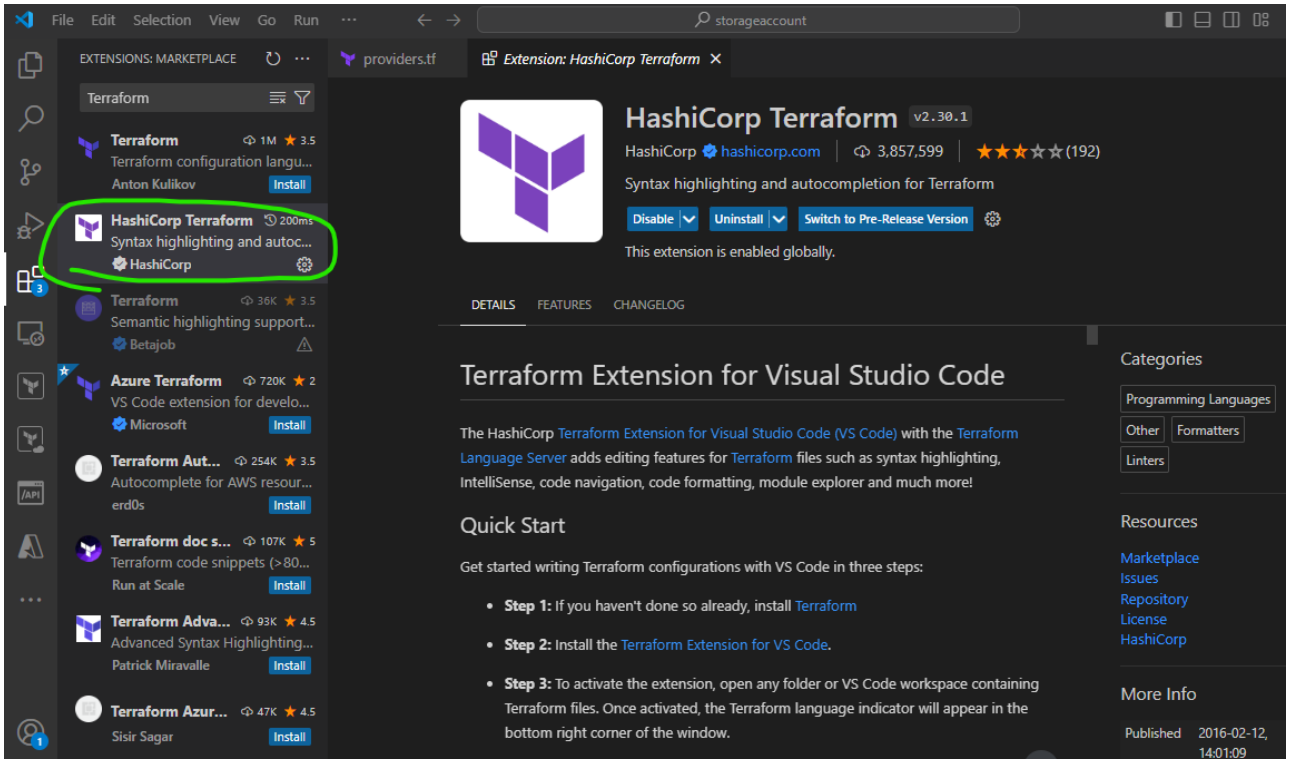
- type defines type of the resource generally type will be in the form of `<provider>_resource` => `azurerm_resource_group`
- name here is not the iname of the resource that will be generated in provider rather this is reference or alias to resource for usage with in template.

```
resource "azurerm_resource_group" "noname" {
    name = "luckyname" # this is name of resource in azure

}
```

- Generally when you create names use underscores rather than hypens

Terraform Visual Studio Code Setup

- We will be using Terraform Extension in visual studio code



Terraform template basic structure

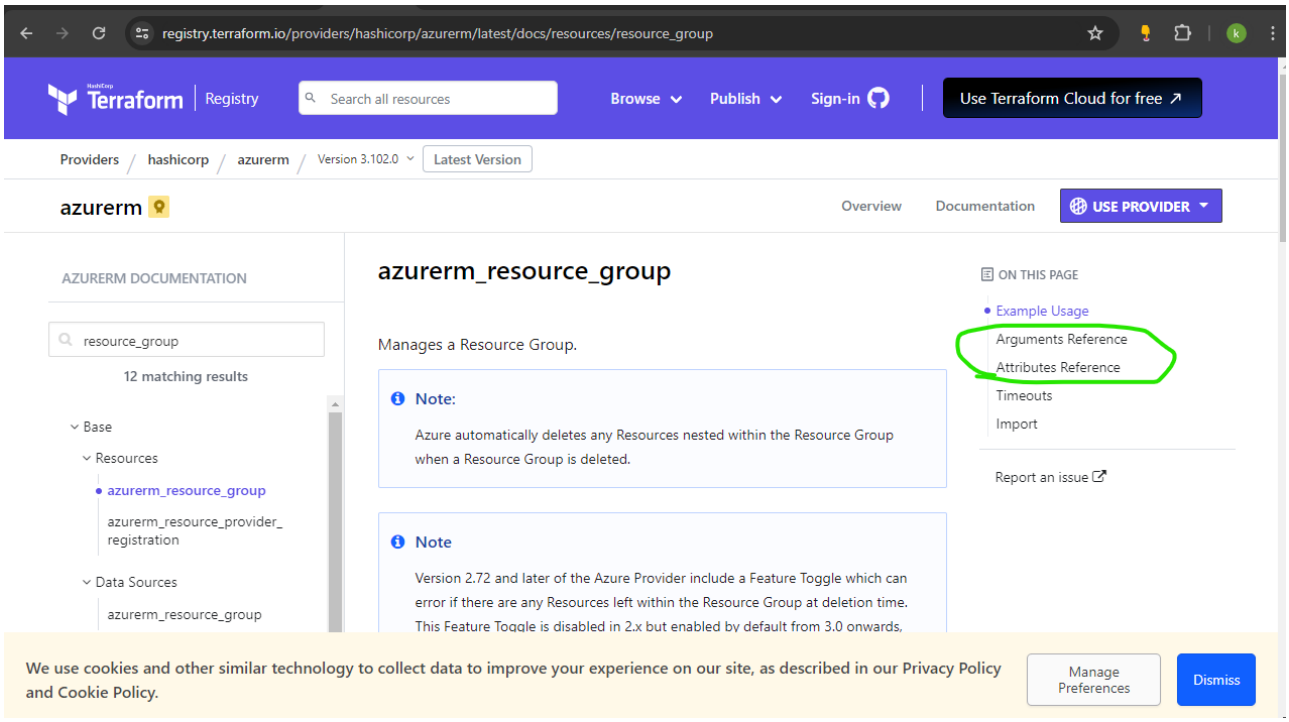
- Create a folder with some meaningful name.
- In this we will be creating minimum 4 files all the time
    - main.tf: The major infra to be created
    - providers.tf: This file will have provider and terraform configruation
    - inputs.tf/variables.tf: This file will have variables
    - outputs.tf: this file has outputs to be shown to the user

Configuring Azure Provider

- Every Provider in terraform needs credentials. Terraform provides various options to authenticate to Azure Refer Here
- We will be using the cli credentials
- To declare azure provider we need to create a provider block with name as azurerm

```
provider "azurerm" {

}
```

- Every resource will have documentation of arguments and attributes



- Refer Here for the changes done according to things learnt in class today