Additional Task

**Name:Shaik Khaja Basha**

**Batch : Batch 11**

**Date : 23.07.2025**

**Task : state file recovery**

1. **What are the step take care if suppose I don’t want to lose my state file what are the major thing will you take care in Terraform**

**Ans: Regular Backups**

* Configure versioning on your remote state bucket
* Take manual snapshots before major operations (terraform state pull > backup.tfstate)

**Access Control**

* Restrict permissions to the state file
* Use IAM policies to limit who can read/modify the state

**Workspace Isolation**

* + Use Terraform workspaces to separate state for different environments
  + Prevents accidental cross-environment modifications

**Enable State Locking**

* + Prevent concurrent operations that could corrupt state
  + For S3 backend, use DynamoDB for locking:

terraform {

backend "s3" {

bucket = "my-terraform-state-bucket"

key = "path/to/my/state.tfstate"

region = "us-east-1"

dynamodb\_table = "terraform-locks"

}

}

**Use Remote Backend Storage**

* + Configure a remote backend like S3, Azure Blob Storage, or Google Cloud Storage
  + Example for AWS S3:

terraform {

backend "s3" {

bucket = "my-terraform-state-bucket"

key = "path/to/my/state.tfstate"

region = "us-east-1"

}

}

**Regular State Validation**

* + Periodically run terraform plan to verify state matches actual infrastructure
  + Use terraform state list to audit managed resources

There are the steps take care for not getting lost of state file