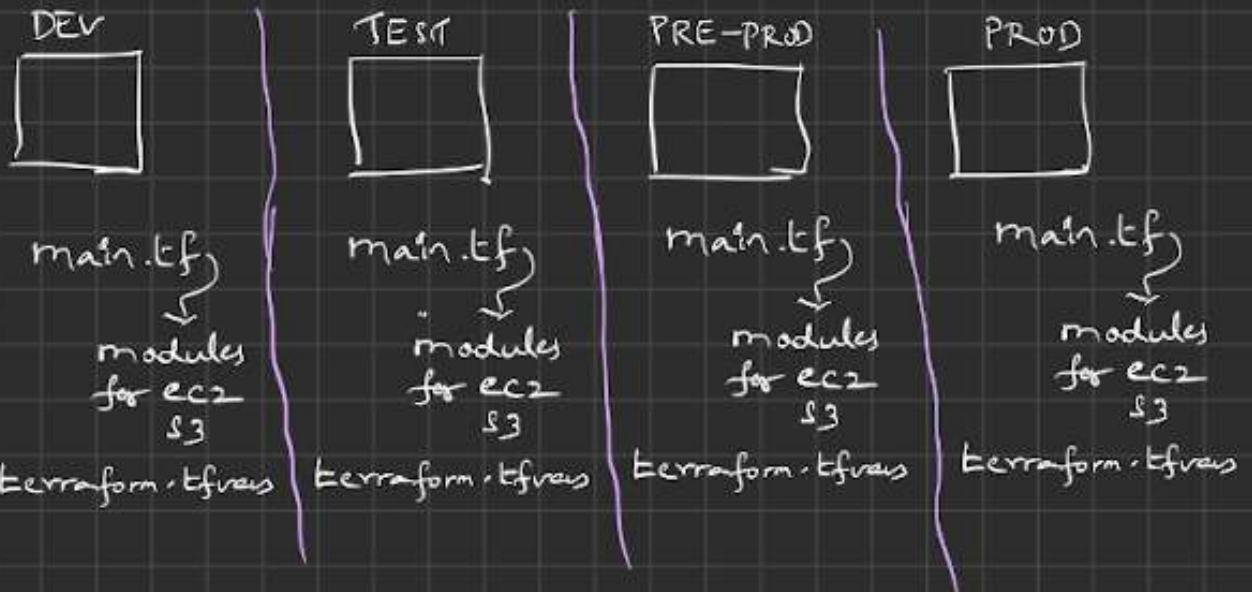


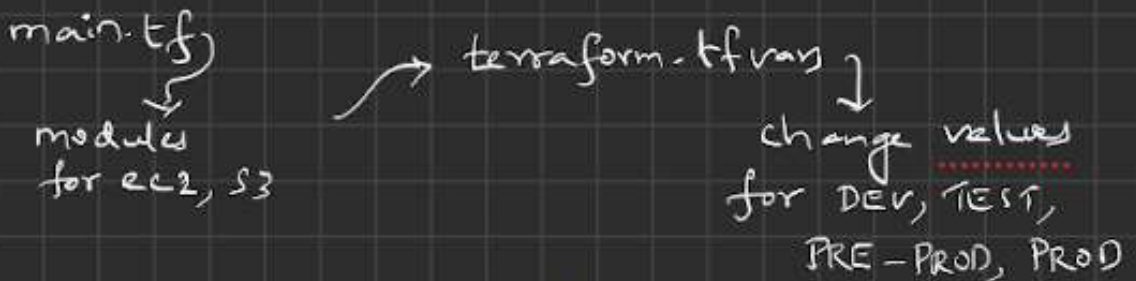
TERRAFORM - WORKSPACES

What is Terraform workspace? What problem it is solving?

ex: Lets say, you are asked to create EC2 + S3 on different environments in a project.



OPTION ②



doesn't work ←

resources get overwritten → statefile records everything.

OPTION ③



terraform has better option to solve this problem "Workspaces"

Creates separate statefiles for each environment within one terraform project.

example

```
$ terraform workspace new dev
$ terraform workspace new test
$ terraform workspace new prod
```

```
- main.tf
- modules
  - ec2-instance
    - main.tf
- terraform.tfstate.d
  - dev
  - test
  - prod
- terraform.tfvars
```

terraform workspace select dev ← switches to "dev" workspace

terraform workspace show

Now, when you run terraform init, it will create terraform.tfstate file under "dev" directory and not in the root folder

this is the beauty of "workspace".
It helps devops engg to segregate environment.

Good practice

option ① : create three tfvars files

terraform-dev.tfvars

terraform-test.tfvars

terraform-prod.tfvars

terraform apply -var-file = prod.tfvars

option ②

```
variable "instance_type" {  
  description = "value"  
  type = map(string)  
  
  default = {  
    "dev" = "t2.micro"  
    "stage" = "t2.medium"  
    "prod" = "t2.xlarge"  
  }  
}  
  
module "ec2_instance" {  
  source = "./modules/ec2_instance"  
  ami = var.ami  
  instance_type = lookup(var.instance_type, terraform.workspace, "t2.micro")  
}
```