Terraform Variables  
  
🔷 In Terraform, variables play a crucial role in defining dynamic values that can be used throughout your configuration files. They help make your infrastructure code more reusable and flexible. Here's how you can define and use variables in Terraform:  
  
🔷 Defining Variables  
  
🔸 Variables in Terraform can be declared in multiple ways:  
  
🔹 1. Inline Variable Declaration  
-------------------------------------------------  
variable "region" {  
 type  = string  
 default = "us-west-2"  
}  
-------------------------------------------------  
  
🔹 2. Using Variable Files  
You can create separate ' .tfvars ' files to define variables:  
-------------------------------------------------  
# variables.tfvars  
  
region = "us-west-2"  
-------------------------------------------------  
  
🔷 Using Variables  
  
🔹 To use a variable in your Terraform configuration:  
-------------------------------------------------  
provider "aws" {  
 region = var.region  
}  
  
resource "aws\_instance" "example" {  
 ami      = "ami-0c55b159cbfafe1f0"  
 instance\_type = "t2.micro"  
 region    = var.region # Using the variable  
}  
-------------------------------------------------  
  
🔷 Setting Variable Values  
  
🔹 Variables can be set using various methods:  
  
🔸 Inline declaration in ' .tf ' files  
🔸 Command-line flags: ' terraform apply -var 'region=us-west-2' '  
🔸 Using variable files: ' terraform apply -var-file="variables.tfvars" '  
  
🔷 Variable Types  
  
Variables can have different types (string, list, map, etc.) to handle different kinds of values.  
  
🔷 Variable Interpolation  
  
🔹 Variables can be interpolated within strings or other expressions:  
-------------------------------------------------  
resource "aws\_security\_group" "example" {  
 name = "example-${var.region}-sg"  
}  
-------------------------------------------------  
  
💡 This is just a basic overview; the usage of variables can be more based on your Terraform configuration and requirements.

