

Creating an instance in aws using terraform in your local system:

Steps:

1. Install terraform on local:

<https://developer.hashicorp.com/terraform/tutorials/aws-get-started/install-cli>

Install terraform extension in vscode:

<https://srinimf.com/2023/04/01/the-easiest-way-to-run-terraform-in-visual-studio-code/>

2. Install aws cli:

<https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html>

Install aws cli extension in vscode:

<https://aws.plainenglish.io/install-and-configure-aws-toolkit-for-vs-code-to-work-with-serverless-application-421d7bf271c9>

3. Create admin user in AWS and create secret keys for cli access.
4. Setup access key in vscode for aws: execute below command in vscode terminal
aws configure
When prompted provide the access key id and then secret access key

5. Create main.tf:

```
terraform {
  required_providers {
    aws = {
      source = "hashicorp/aws"
      version = "~> 4.16"
    }
  }

  required_version = ">= 1.2.0"
}

provider "aws" {
  region = "ap-south-1"
}

resource "aws_instance" "app_server" {
  ami = "ami-0ded8326293d3201b"
  instance_type = "t2.micro"

  tags = {
    Name = "ExampleAppServerInstance"
  }
}
```

6. Now execute the below terraform commands:
terraform init
terraform validate
Terraform apply
7. Check the instance created in AWS console
8. Destroy the instance using: terraform destroy