Terraform tutorial (aws provider doc: https://registry.terraform.io/providers/hashicorp/aws/latest/docs)

1. Select IAM from AWS console
2. Select User from AWS console
3. Select create access key and save it into a file
4. Go to Instances and create a new key-pair named: *terra_key*
5. Install **AWS CLI version 2** from here: https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html
6. Confirm successful installation with: *aws --version*
7. Install **Terraform** from here (more information here: https://developer.hashicorp.com/terraform/tutorials/aws-get-started/aws-build): https://developer.hashicorp.com/terraform/downloads?ajs_aid=01c33e34-bc03-49dc-b85d-8d6460253a82&product_intent=terraform
8. Confirm successful installation: *terraform –v*
9. Configure aws access method with this command from bash:

```
aws configure
AWS Access Key ID [None]: ********
AWS Secret Access Key [None]: *******
```

10. Create a a new directory: *mkdir terra_files*
11. Enter into new directory: *cd terra_files*
12. Open Visual Studio Code and crete terraform file: code terra_main.tf
13. Copy and paste this (substitute region if necessary)
14. Run the command: *terraform init*
15. Run the command: terraform apply

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

  required_version = ">= 1.2.0"
}

provider "aws" {
  region  = "eu-west-1"
}

resource "aws_instance" "app_server" {
  ami           = "ami-04f7efe62f419d9f5"
  instance_type = "t2.micro"
  key_name = "terra_key"
  root_block_device {
    volume_size = 20
        volume_type = "gp2"
  }

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

Docker installation in AWS Linux AMI

1. Accedere via SSH: ssh -i .\terra_key.pem ec2-user@3.252.232.176
2. Install Docker with the following command:

```
sudo yum update -y

sudo yum -y install docker

sudo service docker start

sudo usermod -a -G docker ec2-user

sudo systemctl enable docker

sudo docker version
```

1. Install InfluxDB container:

```
$ docker run -p 8086:8086 -v myInfluxVolume:/var/lib/influxdb2 influxdb:latest
```