

demo-2 Variables (need to add security group manually)

```
terraform apply -vars AWS_REGION=us-west2
git clone https://github.com/maheshkharwadkar/terraform-course.git
cd terraform-course
git checkout terraform-0.12
cd demo-2
terraform init
vi terraform.tfvars
ssh-keygen -f mykey
vi vars.tf
vi script.sh
terraform plan
terraform apply
```

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

demo-3 Remote-State

```
dnf install python3-pip
vi ~/.bash_profile
export PATH=~/.local/bin:$PATH
source ~/.bash_profile
pip3 install awscli --upgrade --user
aws --version
aws configure
```

cat ~/.aws/credentials

demo-18-interpolation

```
terraform init
ssh-keygen -f mykey
terraform apply
terraform apply -var ENV=dev
```

demo-built-in-functions

```
terraform console
replace("hello this is a string", "e", "!")
"the server launched at ${timestamp()}"
list("subnet-1", "subnet-2", "subnet-3")
list(",", "subnet-1", "subnet-2", "subnet-3")
element(list("subnet-1", "subnet-2", "subnet-3"), 0)
element(list("subnet-1", "subnet-2", "subnet-3"), 1)
element(list("subnet-1", "subnet-2", "subnet-3"), 2)
slice(list("subnet-1", "subnet-2", "subnet-3"), 0, 2)
join(",", slice(list("subnet-1", "subnet-2", "subnet-3"), 0, 2))
map("eu-west-1", "ami-1", "us-east-1", "ami-2")
lookup(map("eu-west-1", "ami-1", "us-east-1", "ami-2"), "us-east-1")
```

demo-18b-Project-Structure-demo

```
cd dev
terraform init
ssh-keygen -f mykey
terraform apply
```

ECR/Demo

Redhat Terraform Machine

```
cd docker-demo-1 (Create ECR Repository)
  terraform init
  terraform apply

Ubuntu (docker Machine)
  git clone https://github.com/wardviaene/docker-demo.git
  cd docker-demo
  apt install python3-pip
  apt install awscli
  aws --version
  aws configure
  docker build -t my_ecr_repo:1 .
  `aws ecr get-login`[Not working]
  aws ecr get-login --region region --no-include-email
  docker login -u AWS -p password
https://aws_account_id.dkr.ecr.us-east-1.amazonaws.com

  docker push 604024828336.dkr.ecr.us-east-2.amazonaws.com/myapp:1
```

```
ECS demo-1
  cd docker-demo-2
  copy terraformstate file from ECR demo
  Edit vars.tf
    region
    ECS AMI -
https://docs.aws.amazon.com/AmazonECS/latest/developerguide/ecs-
optimized_AMI.html
  edit vpc.tf
    subnets changes az as per region
  terraform init
  ssh-keygen -f mykey
  terraform apply
  ssh ec2 instance (ec2-user_)
    cat /etc/ecs/ecs.config
    ps aux | grep agent
  docker ps
  curl localhost:3000
  los dir /var/logs/ecs/*
```

## EKS Demo

```
edit eks-workers.tf
  line no. 29 (t2.medium)

curl -LO https://storage.googleapis.com/kubernetes-
release/release/$(curl -s https://storage.googleapis.com/kubernetes-
release/release/stable.txt)/bin/linux/amd64/kubect1
chmod +x kubect1
sudo mv kubect1 /usr/local/bin

wget https://github.com/kubernetes-sigs/aws-iam-
authenticator/releases/download/v0.3.0/heptio-authenticator-
aws_0.3.0_linux_amd64
chmod +x heptio-authenticator-aws_0.3.0_linux_amd64
sudo mv heptio-authenticator-aws_0.3.0_linux_amd64
```

```
/usr/local/bin/heptio-authenticator-aws
```

```
terraform output kubeconfig  
  copy kubeconfig
```

```
mkdir ~/.kube  
vi ~/.kube/config
```

```
terraform output config-map-aws-auth
```

```
vi config-map-aws-auth.yml  
kubectl apply -f config-map-aws-auth.yml
```

```
kubectl get nodes
```