**Step 01**: Forking the source code

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**Step 02:** Dockerize the application

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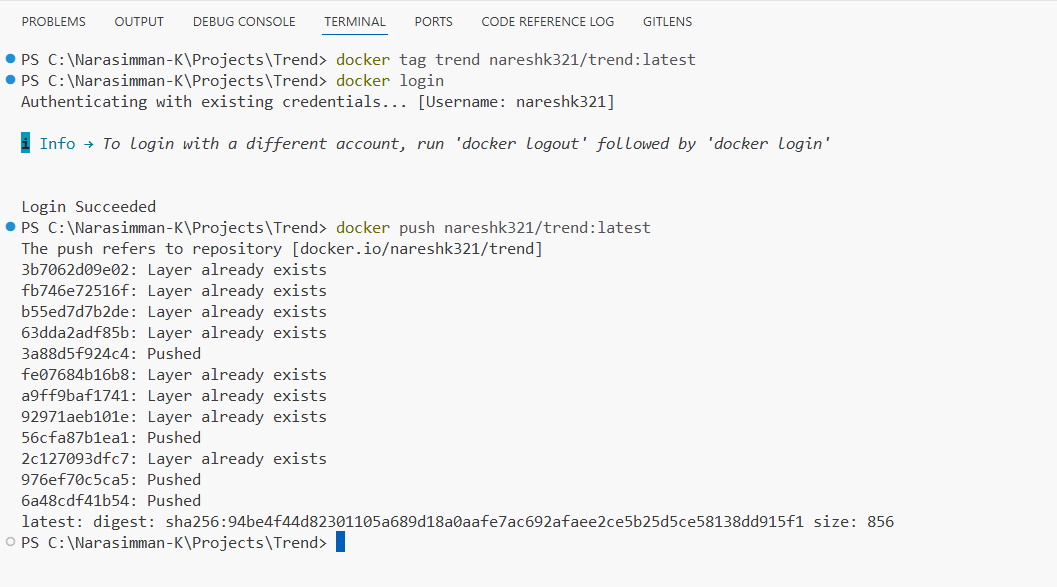
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**Step 03**: application running on port 3000

A person with blonde hair and black scarf

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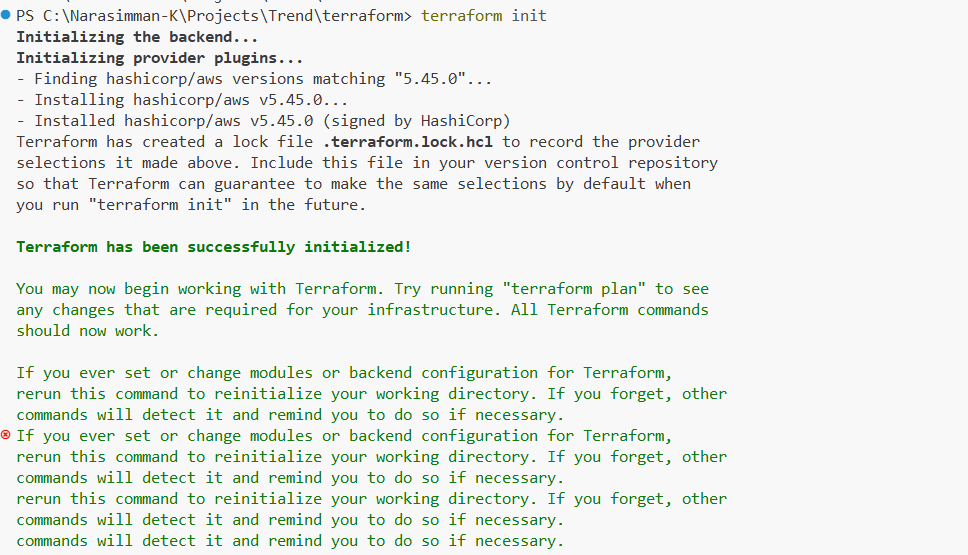
**Step 04:** Pushing the image into Docker hub



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Step 05: Creating infrastructure using Terraform



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A screenshot of a computer program

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After Terraform execution, an instance has been created

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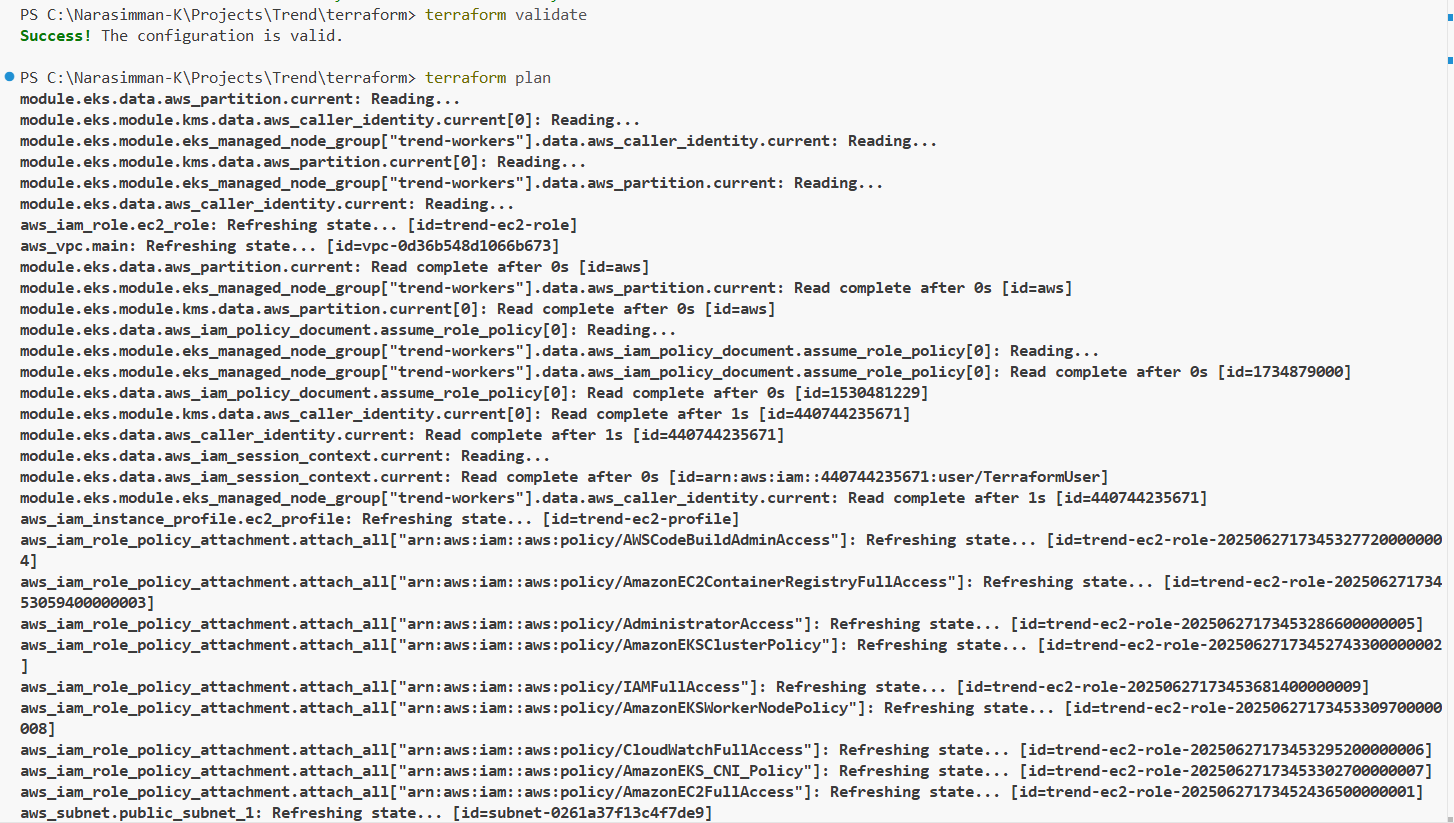
Creating ekscluster.tf file



Executing Terraform with EKS

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After executing Terraform for cluster creation

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Worker nodes created successfully

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Update kubeconfig:

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Service.yaml

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Deploying the application

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Load balancer

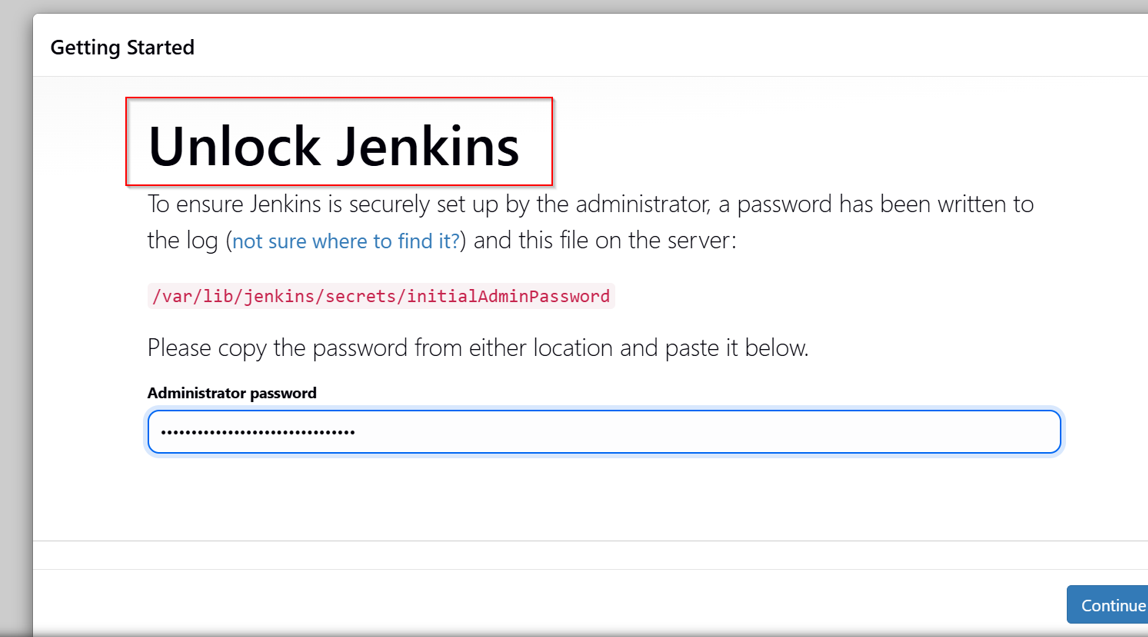
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Connected to the Jenkins server:



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Creating Jenkinsfile:

pipeline {

agent any

environment {

DOCKER\_IMAGE = "prasanth0003/react\_app"

DOCKER\_CREDENTIALS\_ID = 'dockerhub'

}

stages {

stage('Clone Repository') {

steps {

git branch: 'main', credentialsId: 'github', url: 'https://github.com/prasanth-wizard/Trend.git'

}

}

stage('Build Docker Image') {

steps {

script {

docker.build("${DOCKER\_IMAGE}")

}

}

}

stage('Login & Push to DockerHub') {

steps {

script {

docker.withRegistry('', DOCKER\_CREDENTIALS\_ID) {

docker.image("${DOCKER\_IMAGE}").push("latest")

}

}

}

}

stage('Deploy to EKS') {

steps {

sh 'aws eks --region us-east-1 update-kubeconfig --name trend-cluster'

sh 'kubectl apply -f deployment.yaml'

sh 'kubectl apply -f service.yaml'

sh 'kubectl get svc'

}

}

}

}

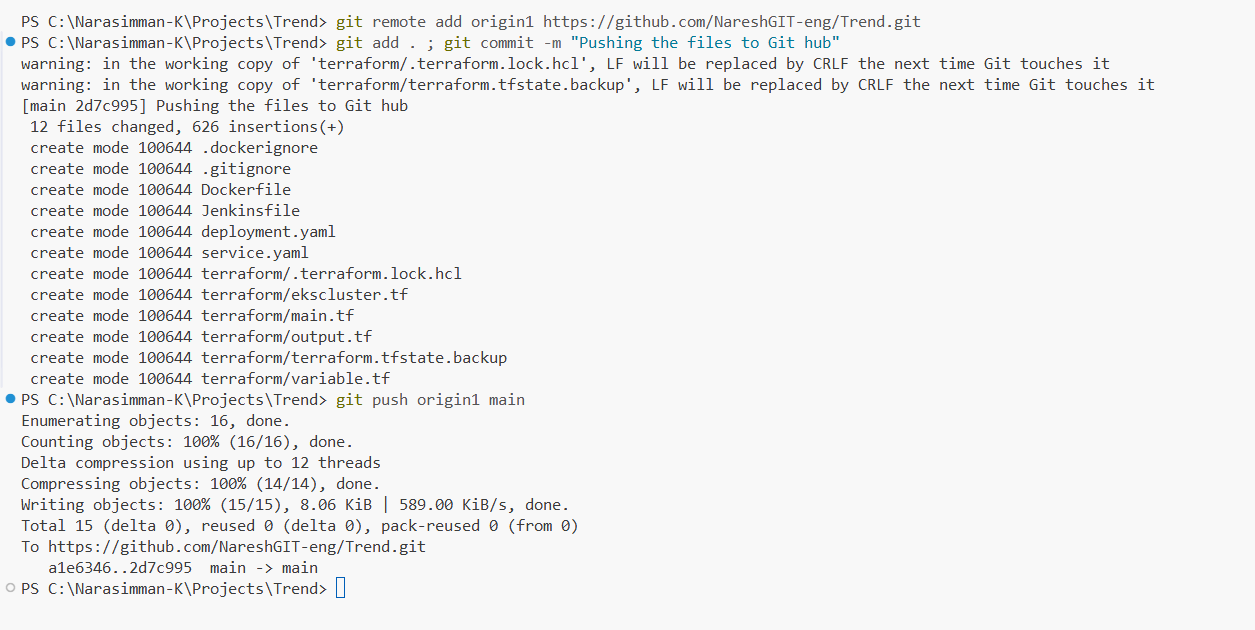
Configuring the Pipeline:

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A person with blonde hair and a scarf

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