Dockerfile

```
FROM node:18-alpine

WORKDIR /app

COPY package*.json ./

RUN npm install

COPY . .

RUN npm run build

RUN npm install -g serve

EXPOSE 3000

CMD ["serve", "-s", "build", "-l", "3000"]
```

.dockerignore

```
node_modules
.git
Dockerfile
README.md
```

Service.yml

```
apiVersion: v1
kind: Service
metadata:
  name: trend-service
spec:
  type: LoadBalancer
  selector:
    app: trend
  ports:
   - port: 80
     targetPort: 80
```

Deployment.yml

```
apiVersion: apps/v1
kind: Deployment
```

```yaml
metadata:
  name: trend-app
spec:
  replicas: 2
  selector:
    matchLabels:
      app: trend
  template:
    metadata:
      labels:
        app: trend
    spec:
      containers:
      - name: trend-container
        image: poov23/trend-app:latest
        ports:
        - containerPort: 80
```

Jenkinsfile

```groovy
pipeline {
    agent any

    environment {
        DOCKER_IMAGE = "poov23/trend-app"
    }

    stages {

        stage('Clone') {
            steps {
                git 'https://github.com/Poovarasan-23/Trend-DevOps.git'
            }
        }
```

```
        stage('Build Docker Image') {

            steps {

                sh 'docker build -t $DOCKER_IMAGE:latest app/'

            }

        }


        stage('Push Image') {

            steps {

                withCredentials([usernamePassword(credentialsId: 'dockerhub',

                            usernameVariable: 'USER',

                            passwordVariable: 'PASS')]) {

                    sh '''

                    echo $PASS | docker login -u $USER --password-stdin

                    docker push $DOCKER_IMAGE:latest

                    '''

                }

            }

        }


        stage('Deploy to EKS') {

            steps {

                sh 'kubectl apply -f k8s/'

            }

        }

    }

}


```

Main.tf

```
provider "aws" {

 region = "ap-south-1"

}
```

```
resource "aws_instance" "jenkins" {
  ami           = "ami-0f5ee92e2d63afc18"
  instance_type = "t3.medium"


  key_name = "awsguvi2"


  tags = {
    Name = "Jenkins-Server"
  }
}
```