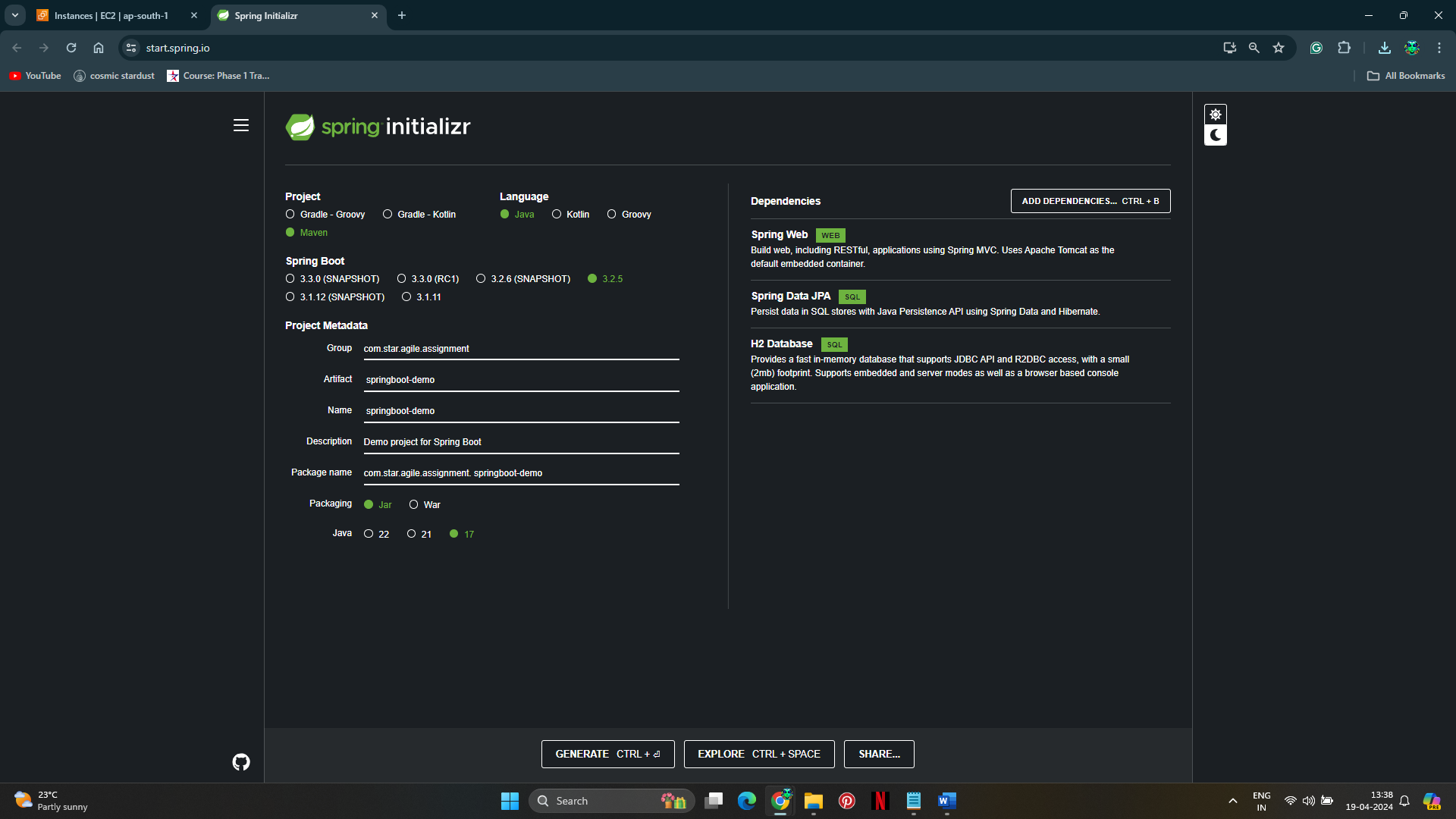
STARAGILE KUBERNETES ASSIGNMENT

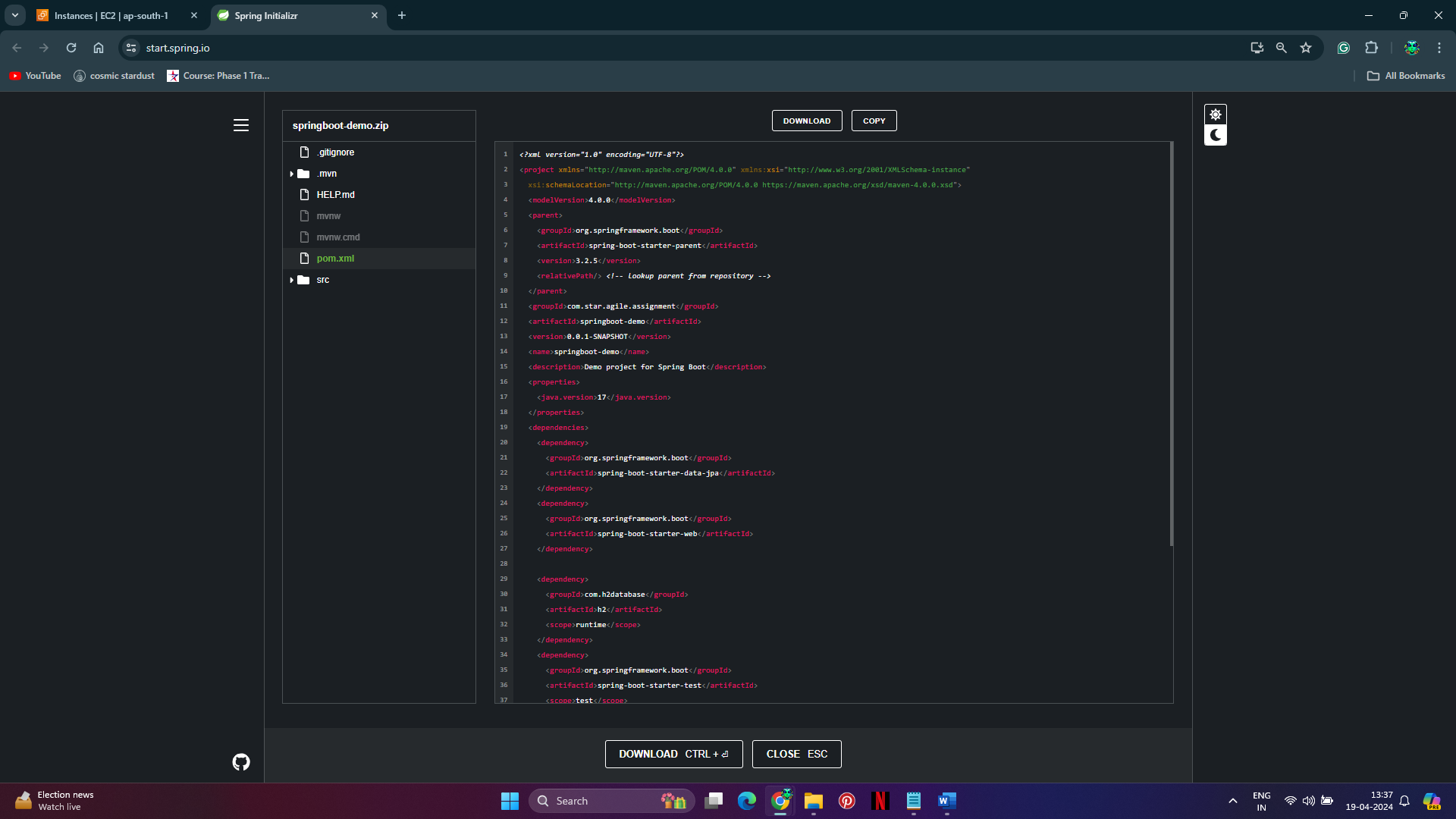
**Step 1: Go to Spring Initializr**

1. Open your web browser and navigate to [Spring Initializr](https://start.spring.io/).

**Step 2: Choose Configuration**

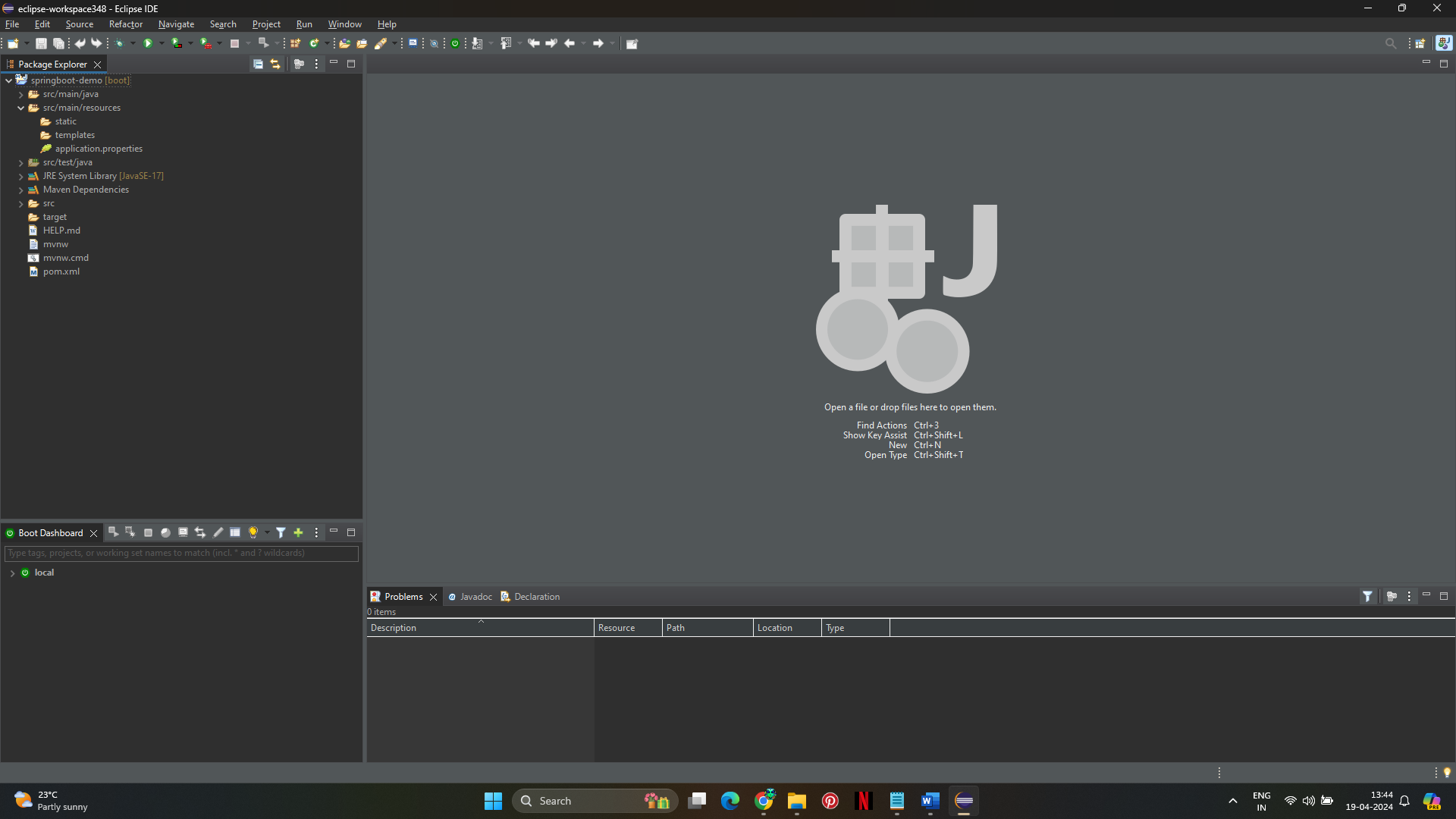
**Step 3: Select Dependencies**

**Step 4: Verify Dependencies**

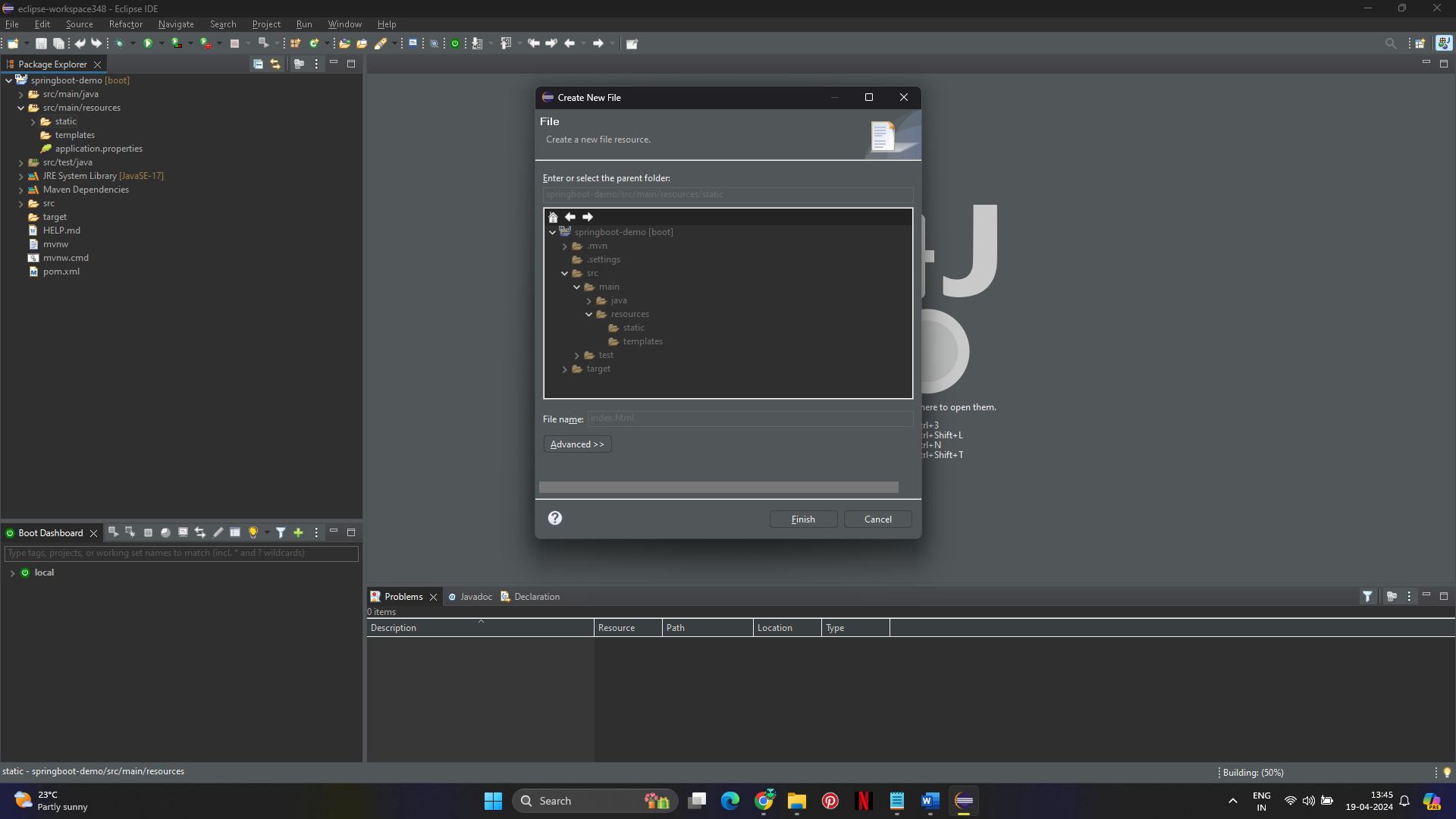


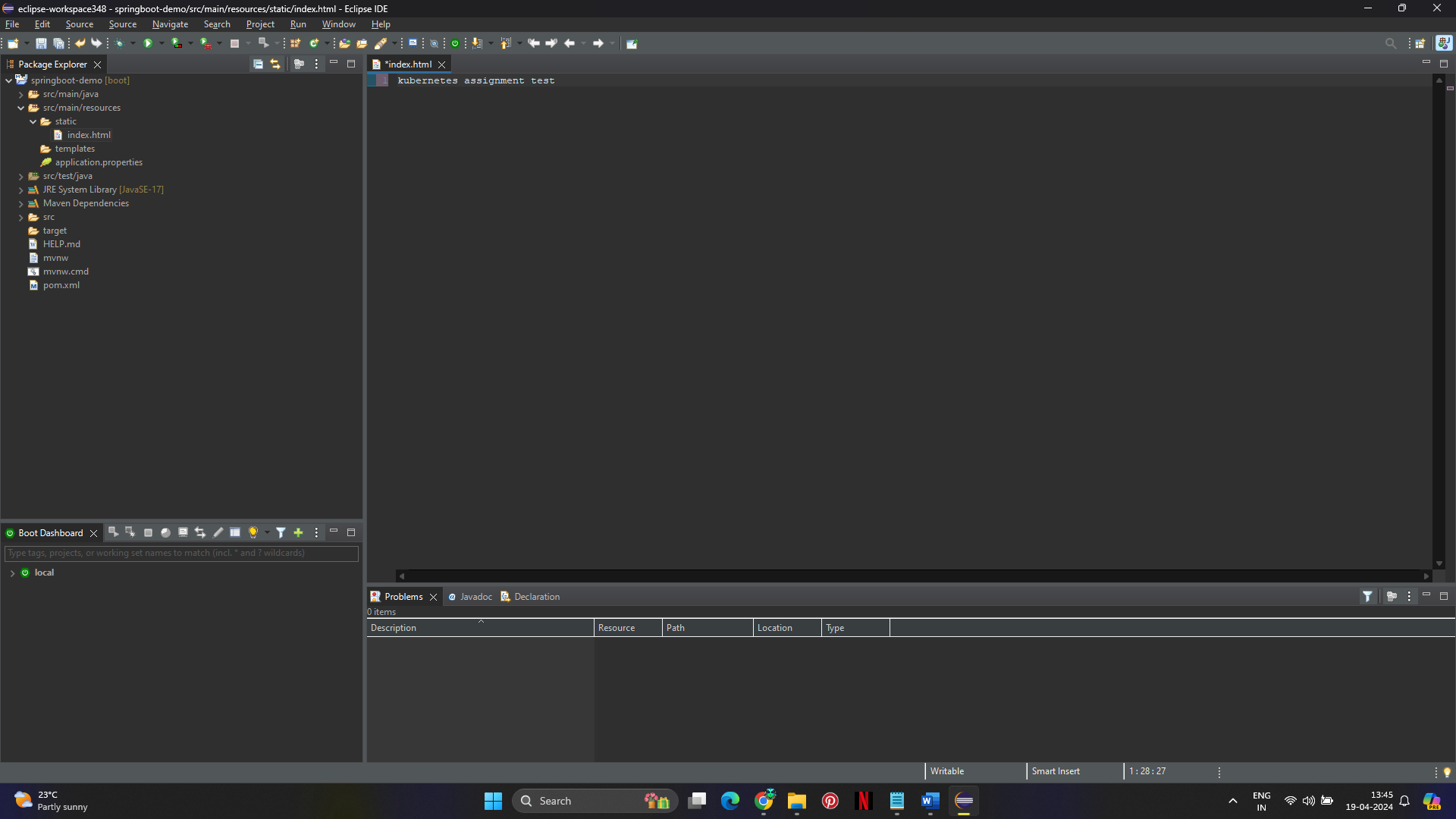
**Step 5: Download Project Template**

**Step 6: Import Project into Eclipse**

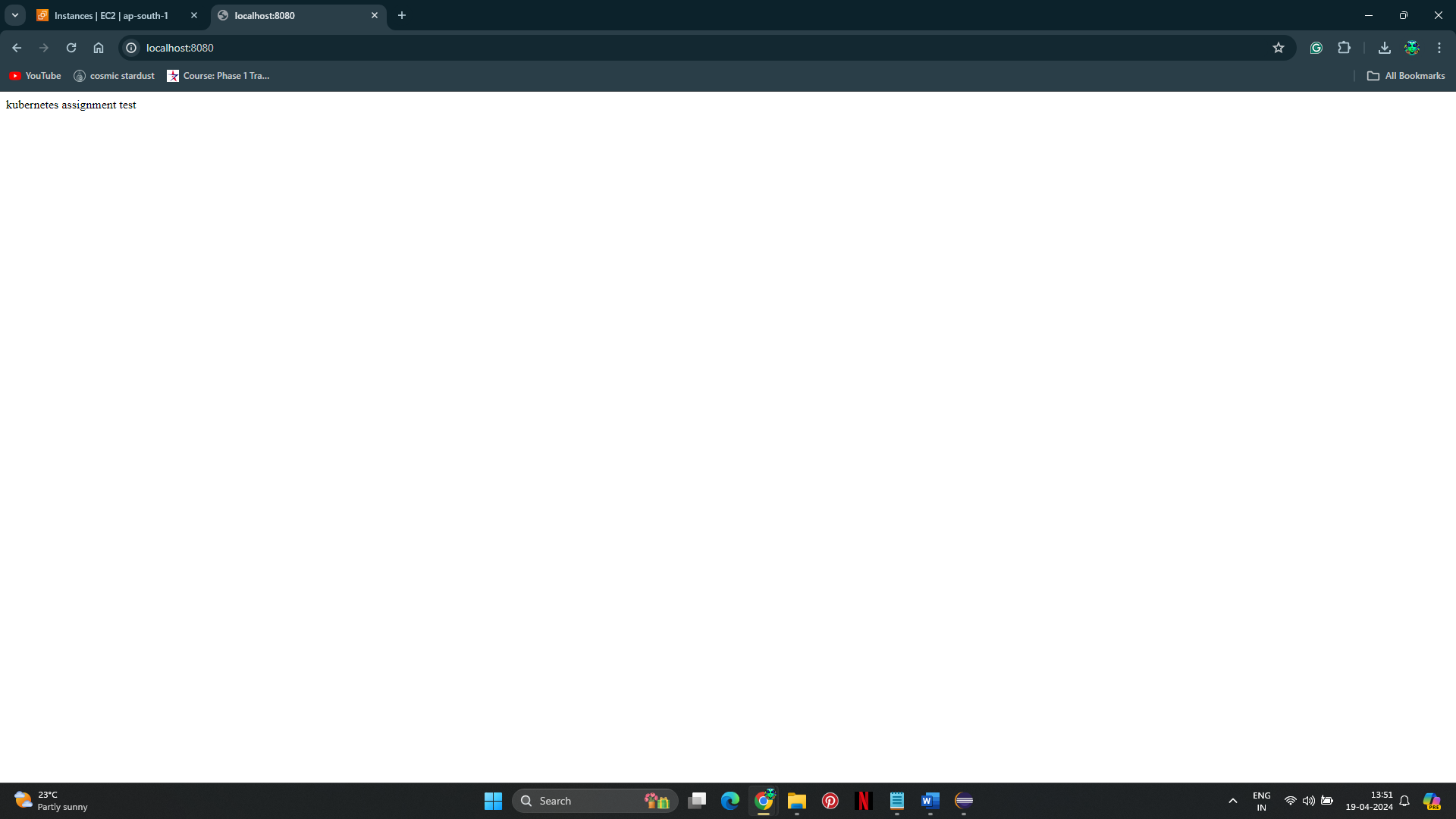


**Step 7: Add index.html**

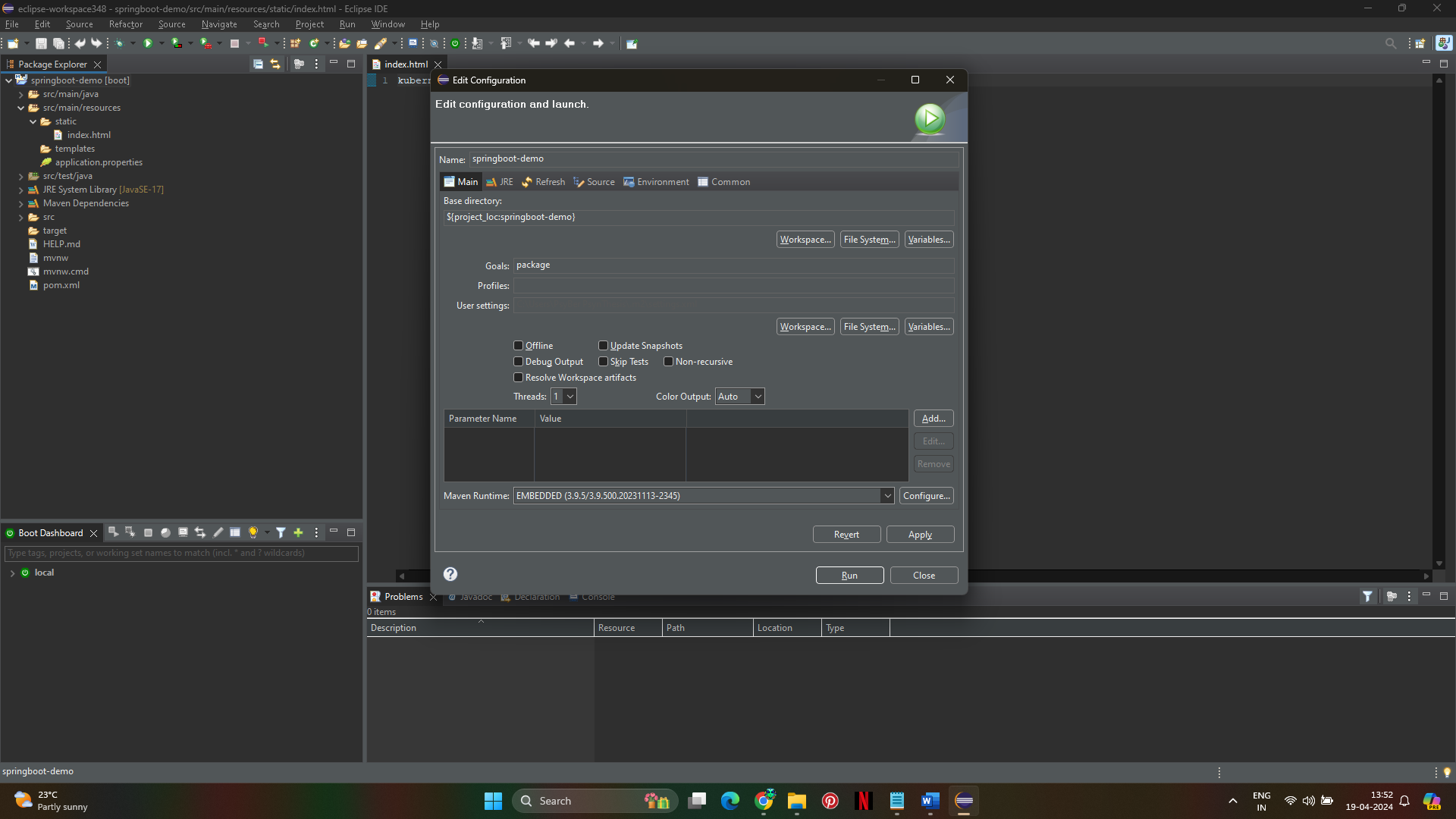




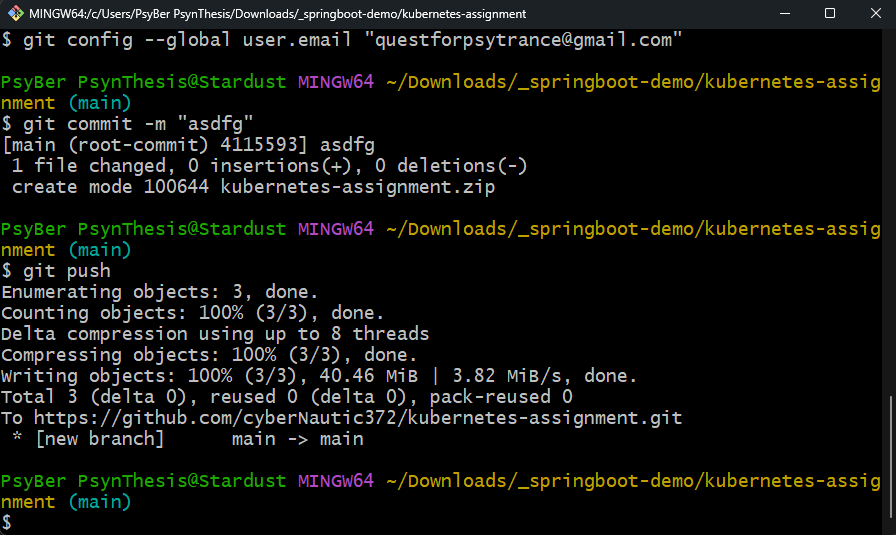
Test the Project



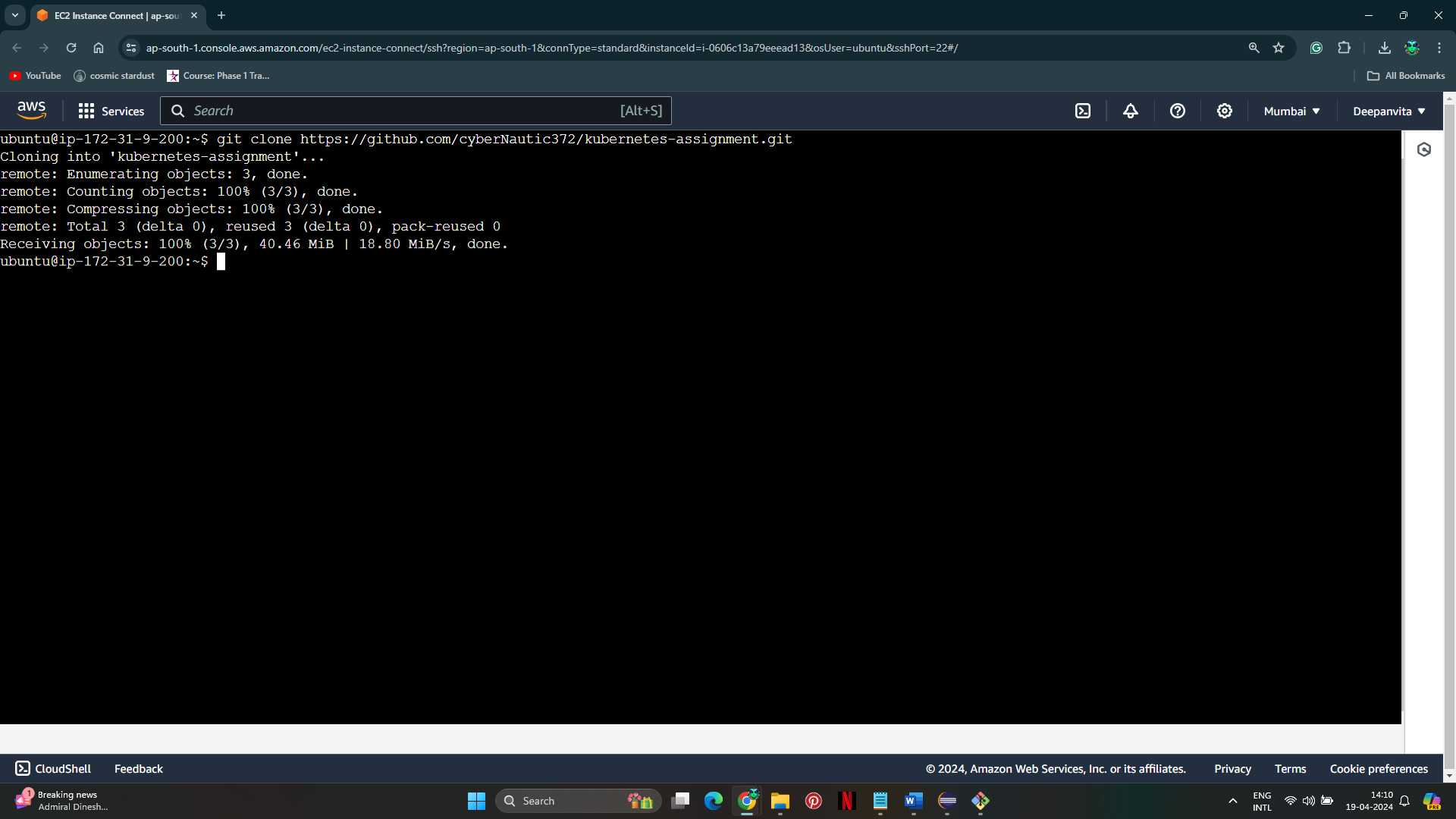
Build the project



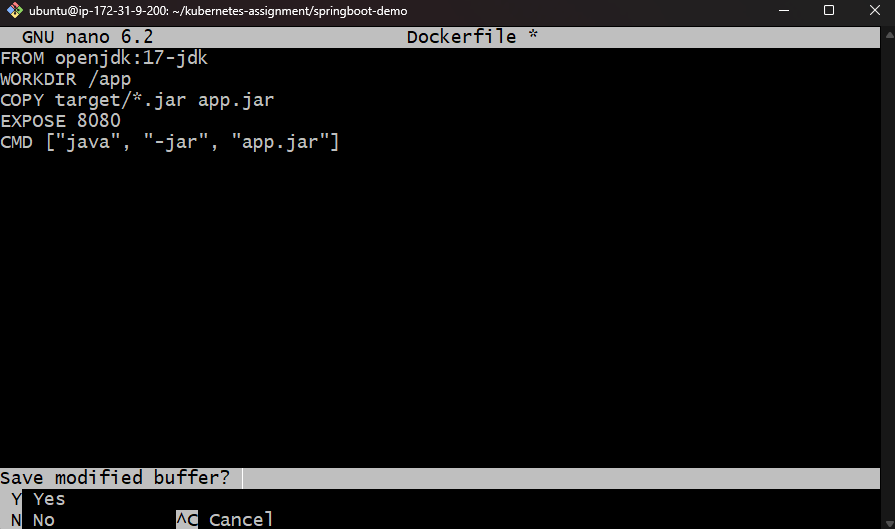
Upload to GIThub



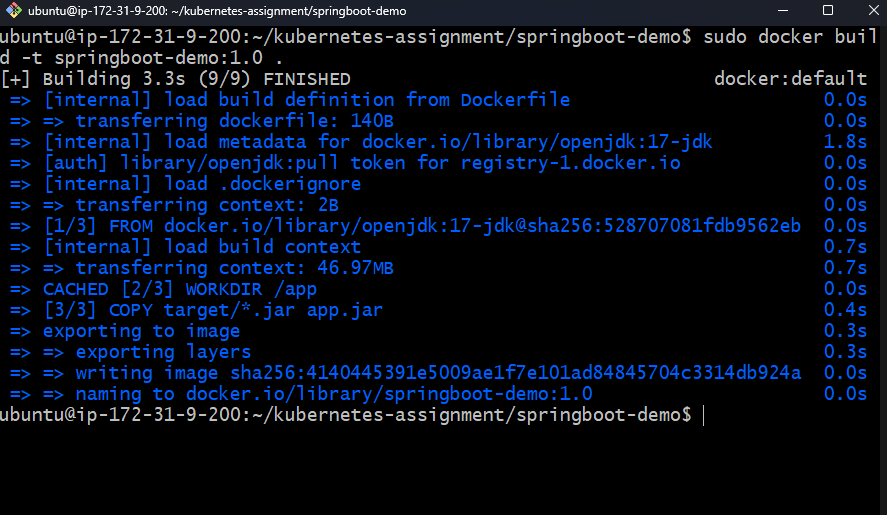
Clone the project



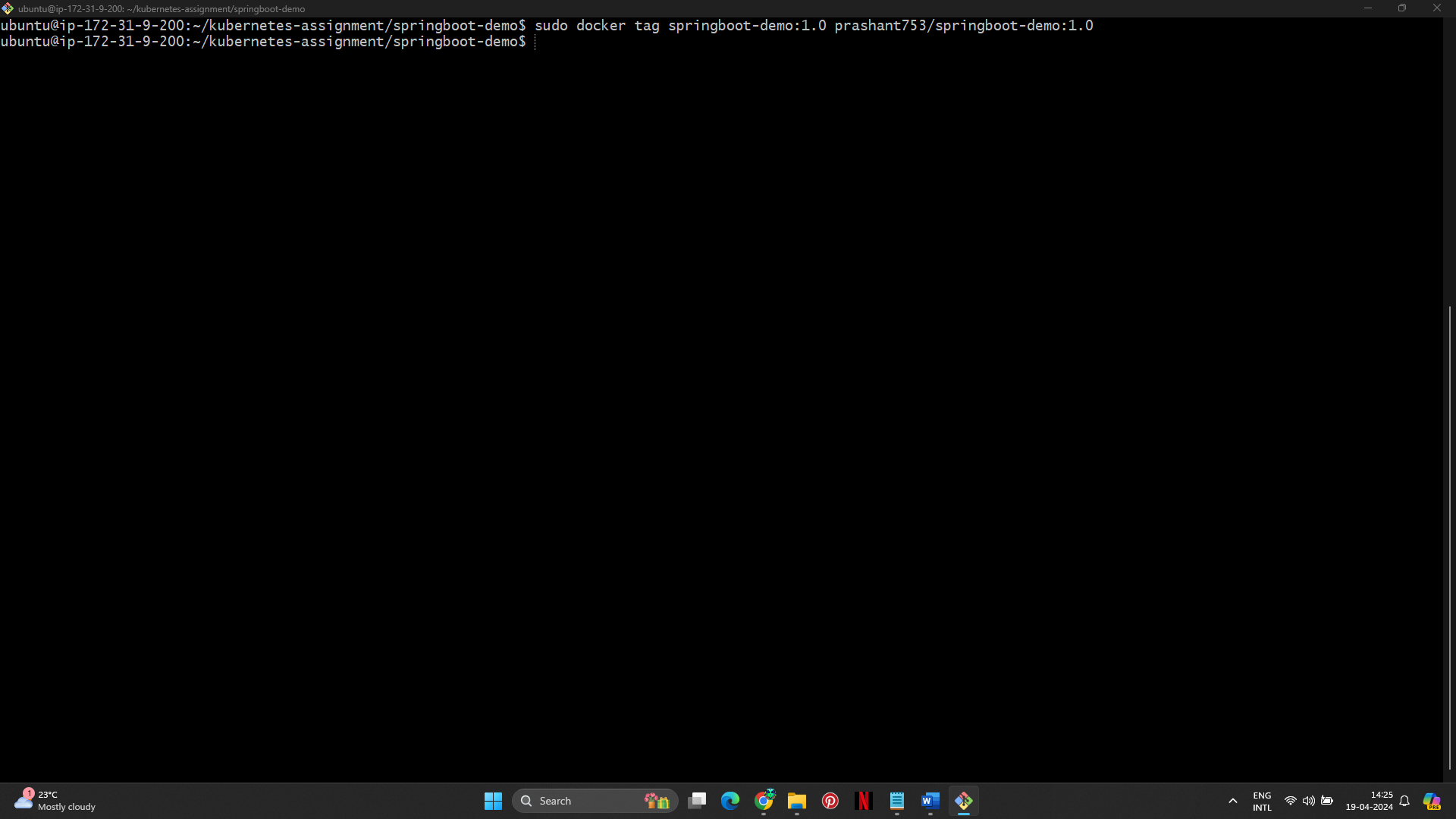
**Step 8: Write Dockerfile**



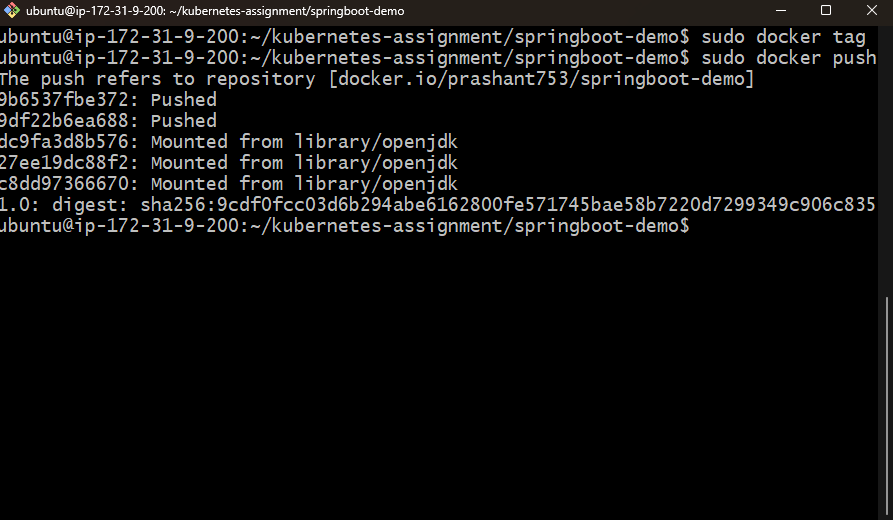
**Step 9: Build and Push Docker Image**



1. Tag the Docker image:

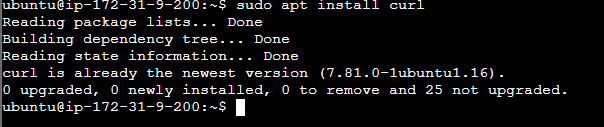


1. Push the Docker image to Docker Hub:

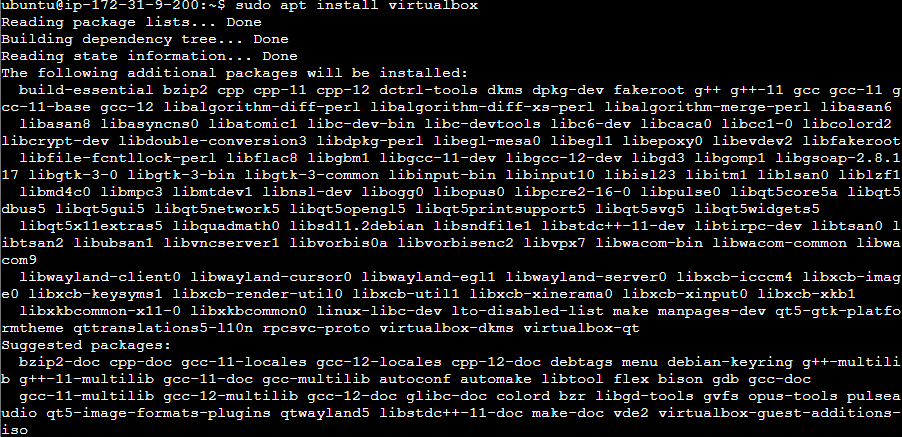


**Step 10: Setup Kubernetes Minikube Single Node Cluster**

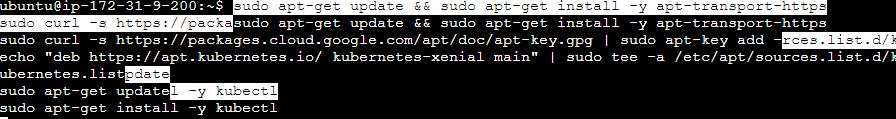
1. **Install Minikube Dependencies**:

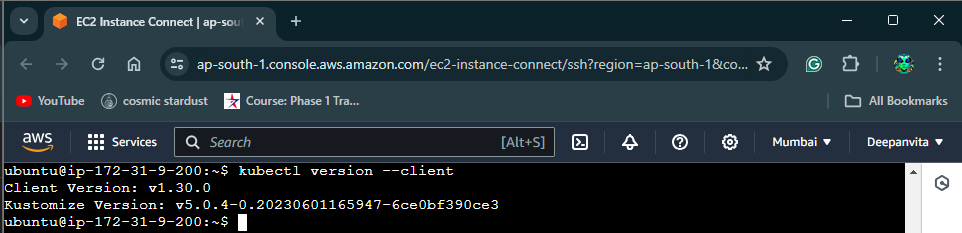


1. **Install VirtualBox**:

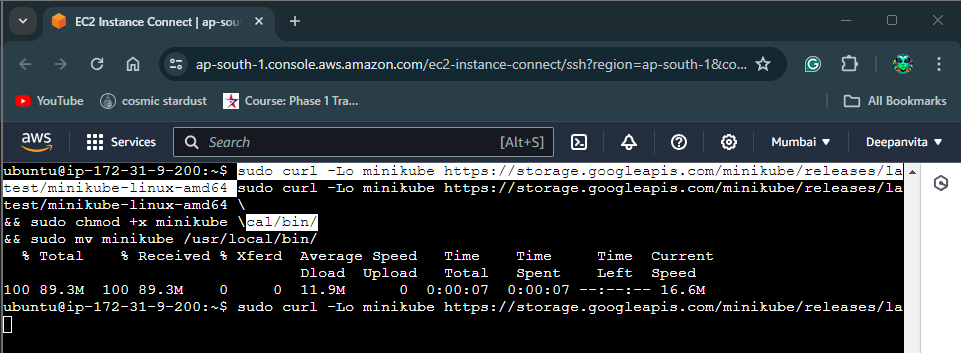


1. **Install kubectl**:

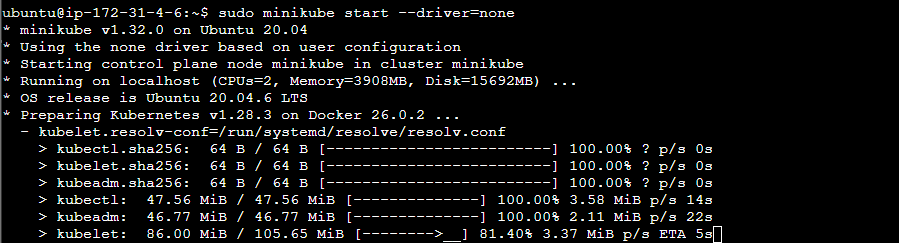


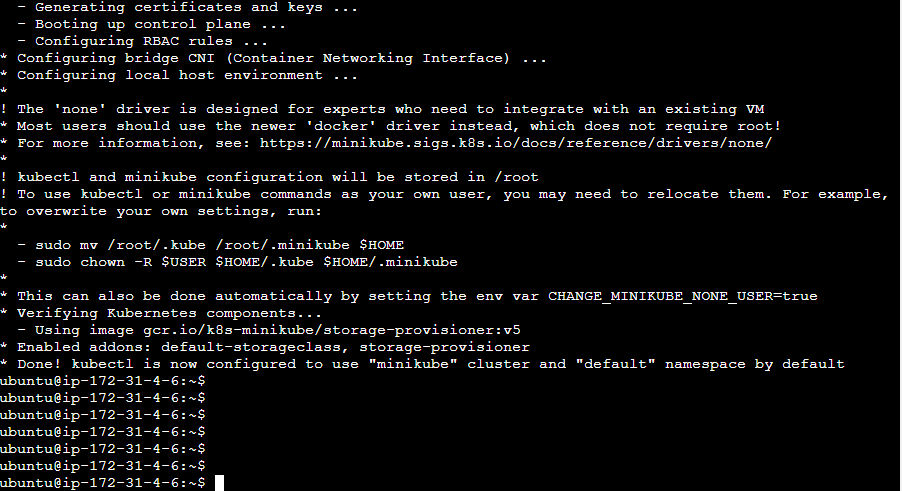


1. **Install Minikube**:

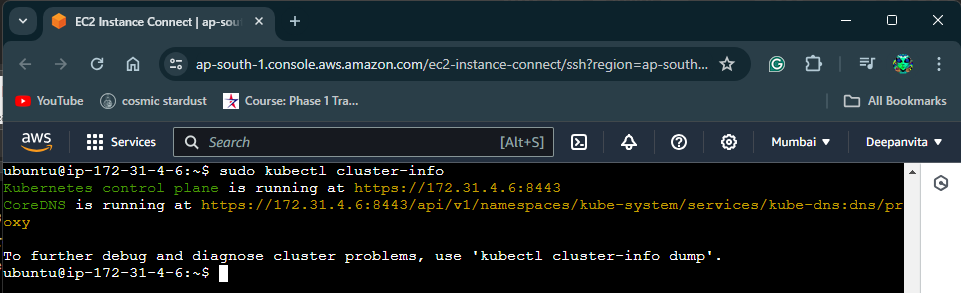


1. **Start Minikube**:

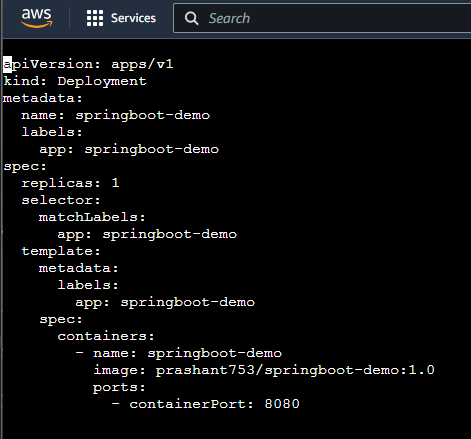


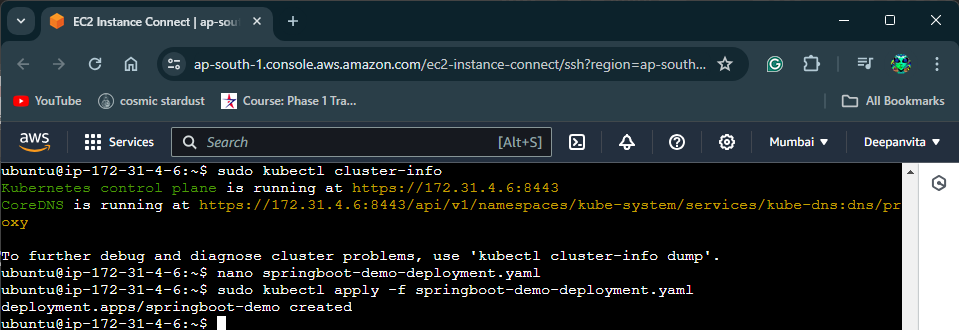


1. **Verify Minikube**: Check if Minikube is running and the cluster is up:

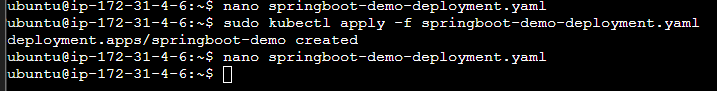


**Step 11: Write a Deployment to Deploy the Application as a Pod Using kubectl**

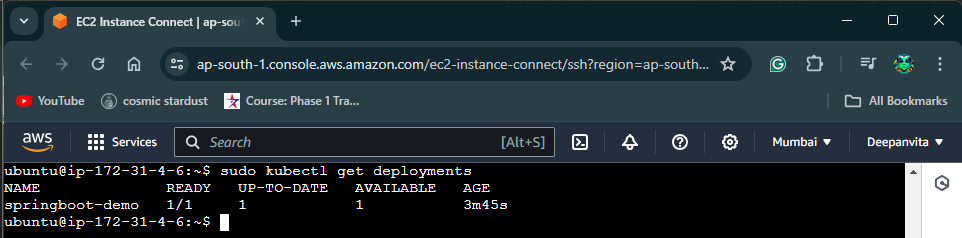




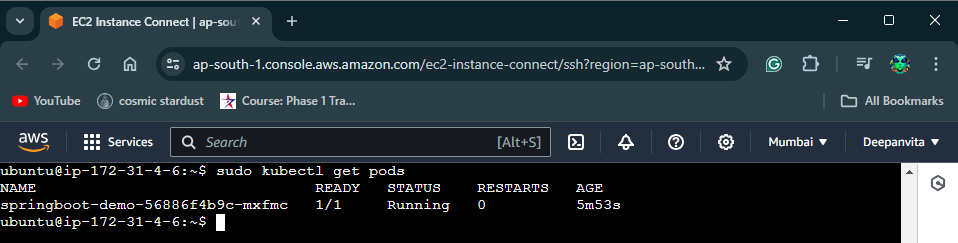
**Apply the Deployment**



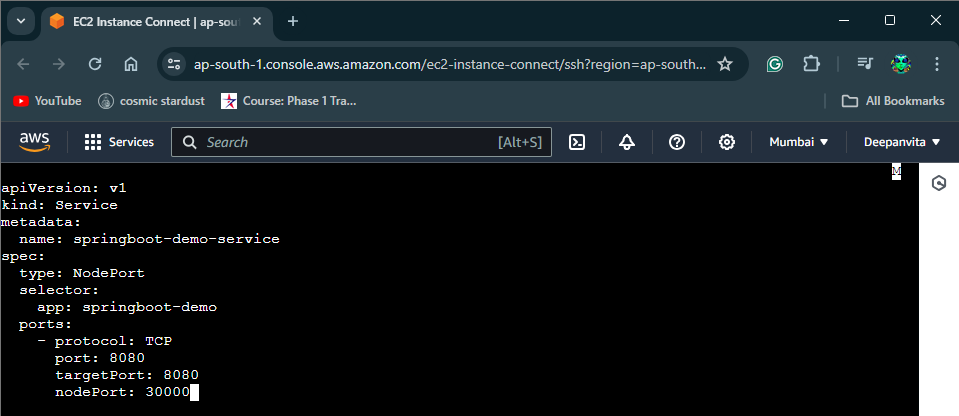
**Verify Deployment**:



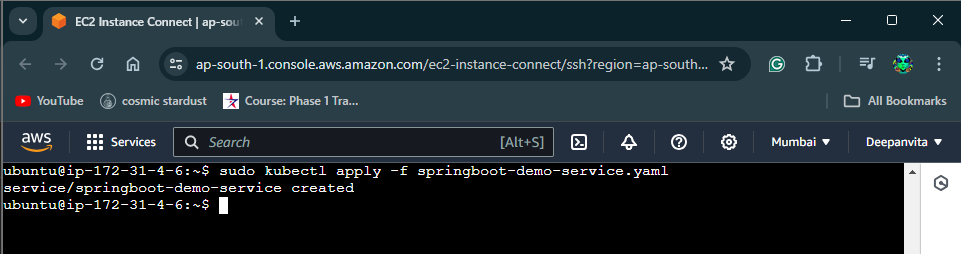
**Check Pods**:



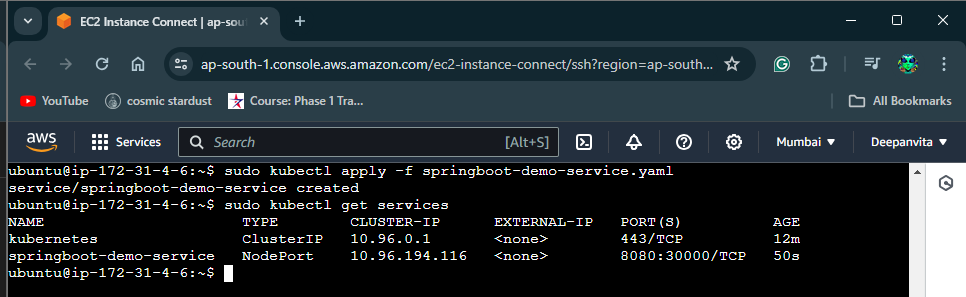
**Step 12: Create the NodePort Service to Expose the Deployed Container to the Outside World**



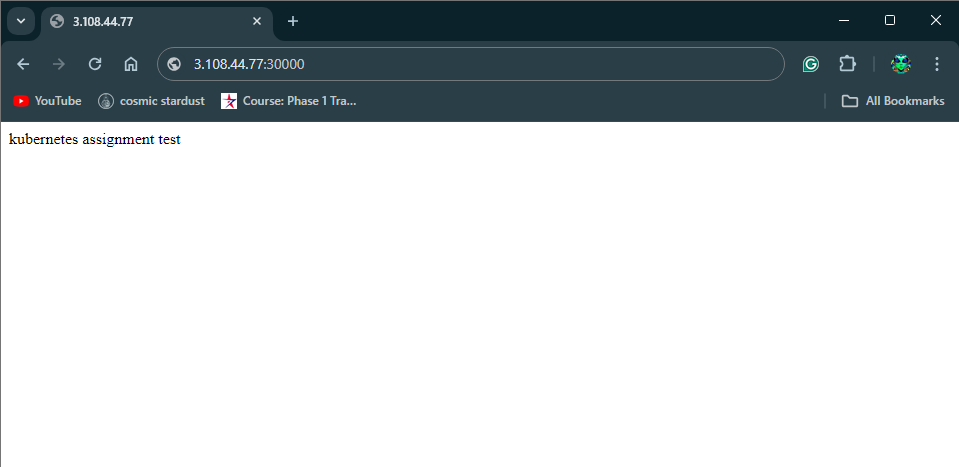
**Apply the Service**:



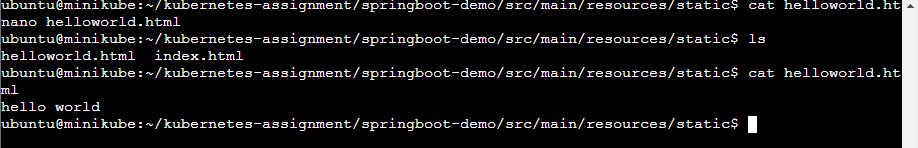
**Verify Service**



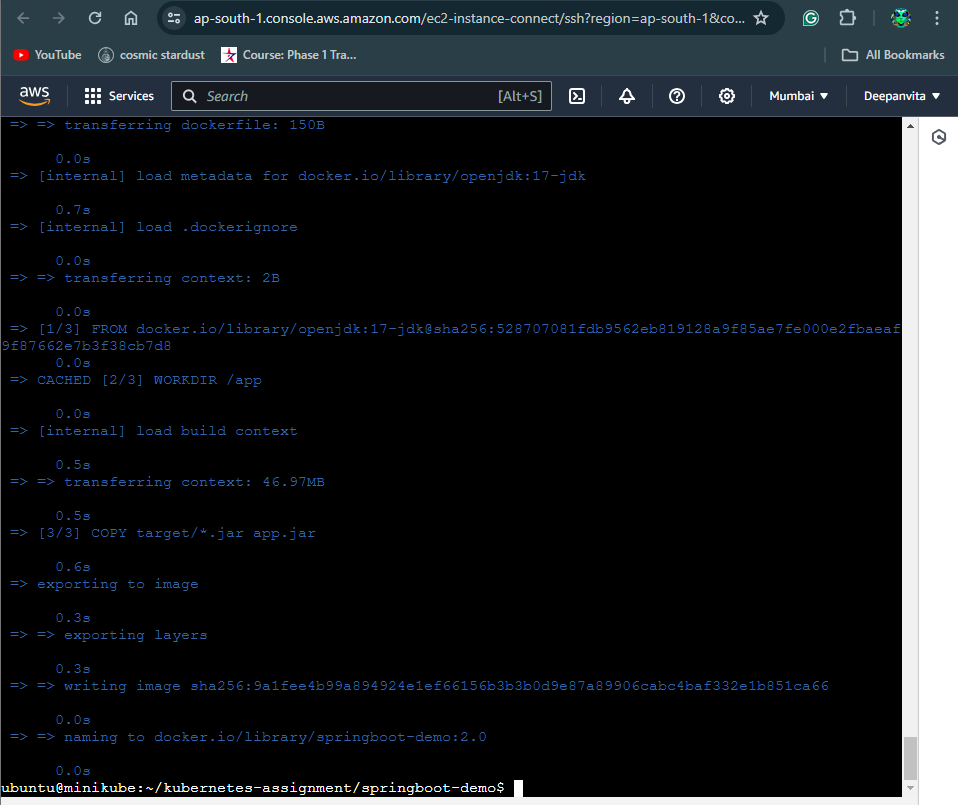
**Step 13: Verify the Application Over Browser**

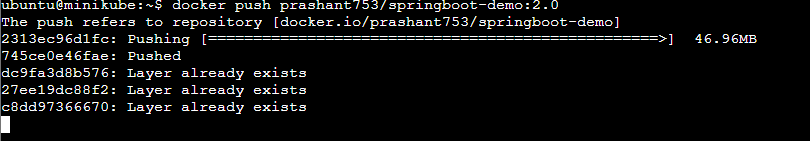


**Step 14: Add Hello World.html to the Spring Boot Application**

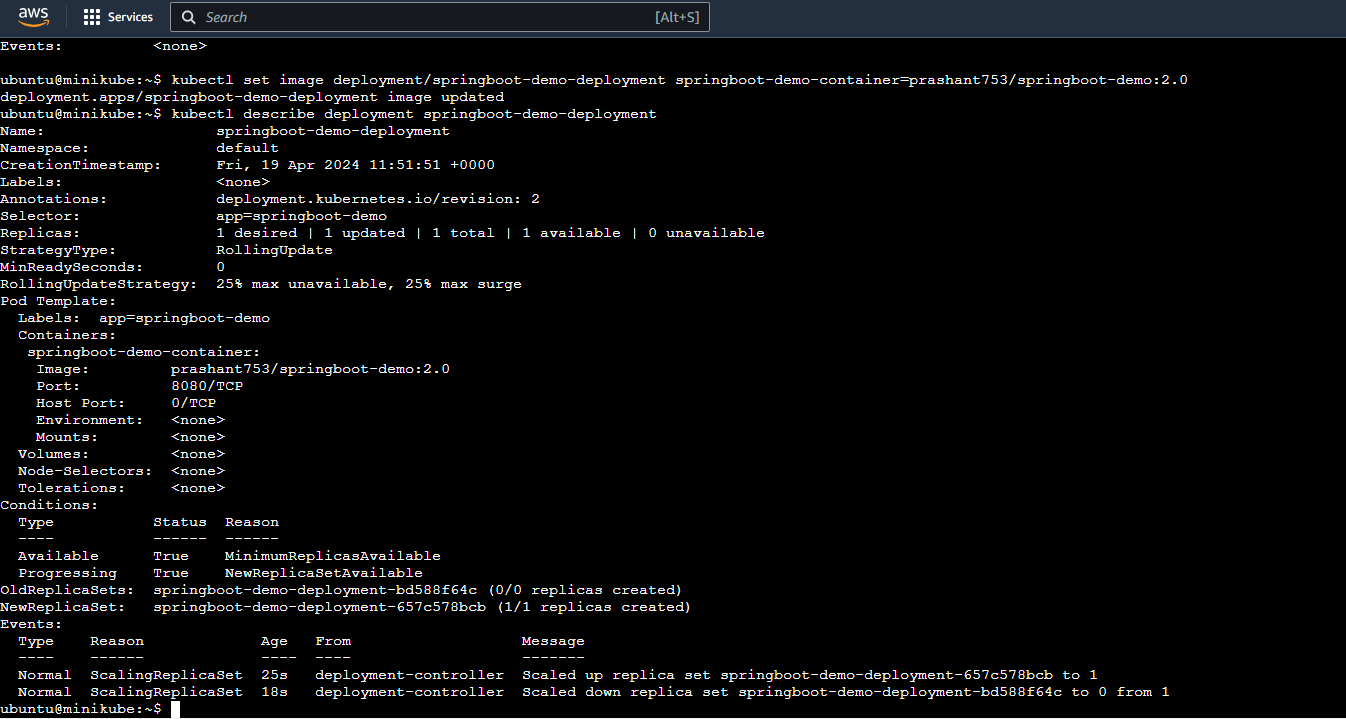


**Step 15: Build the Docker Image and Give the Tag as 2.0**



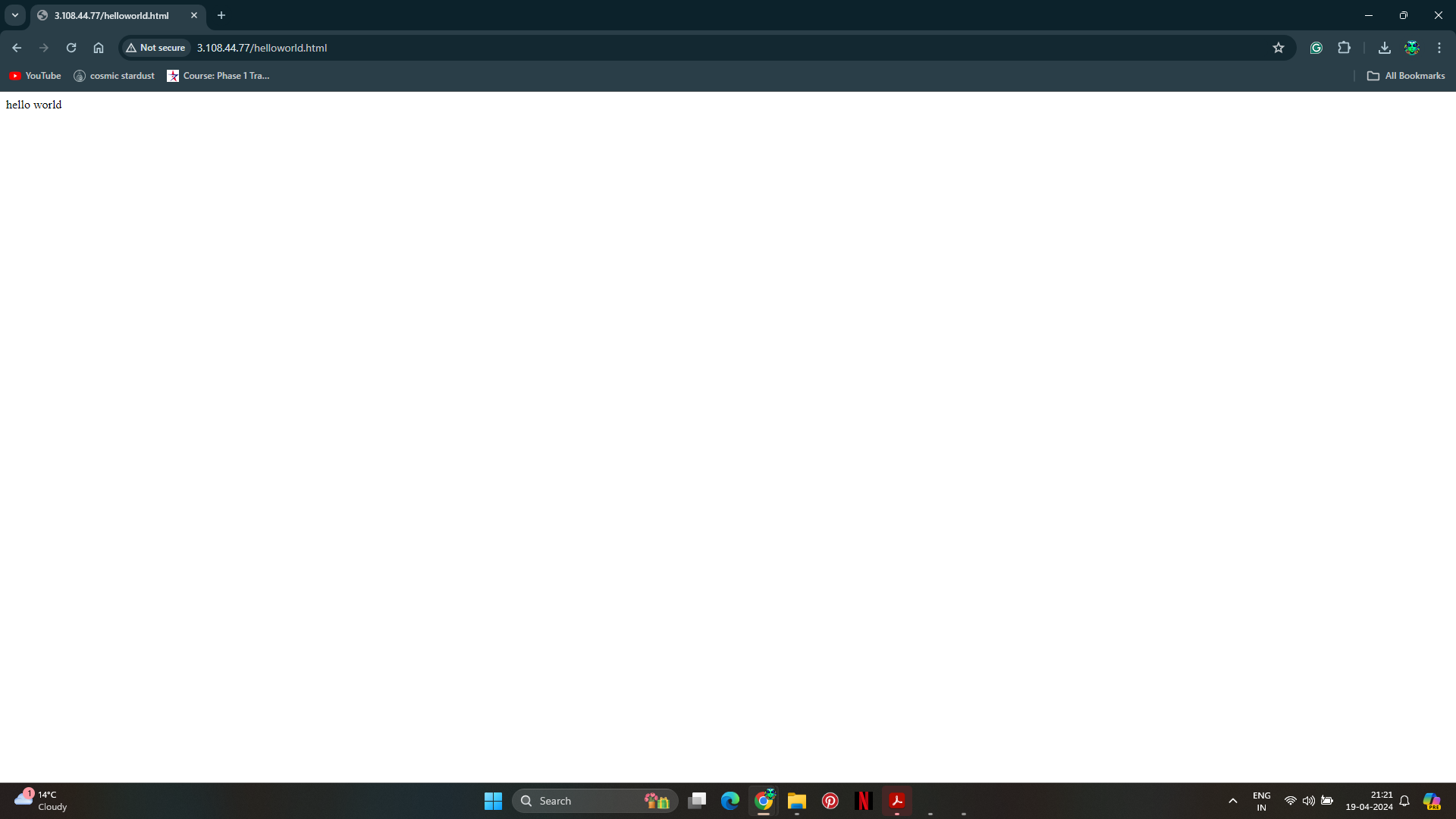


**Step 16: Roll Out the Deployment of the 2.0 Version**



**Step 17: Verify the App that New Version has Been Deployed**

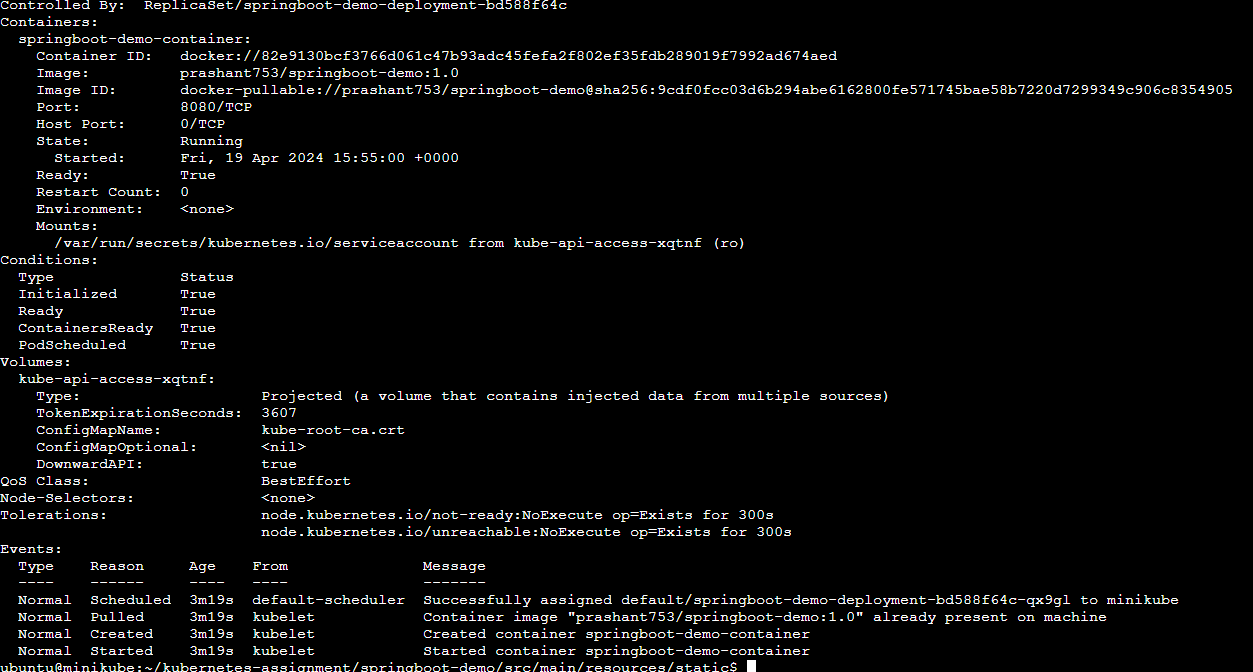
1. Refresh your browser and check if the new version is deployed successfully.



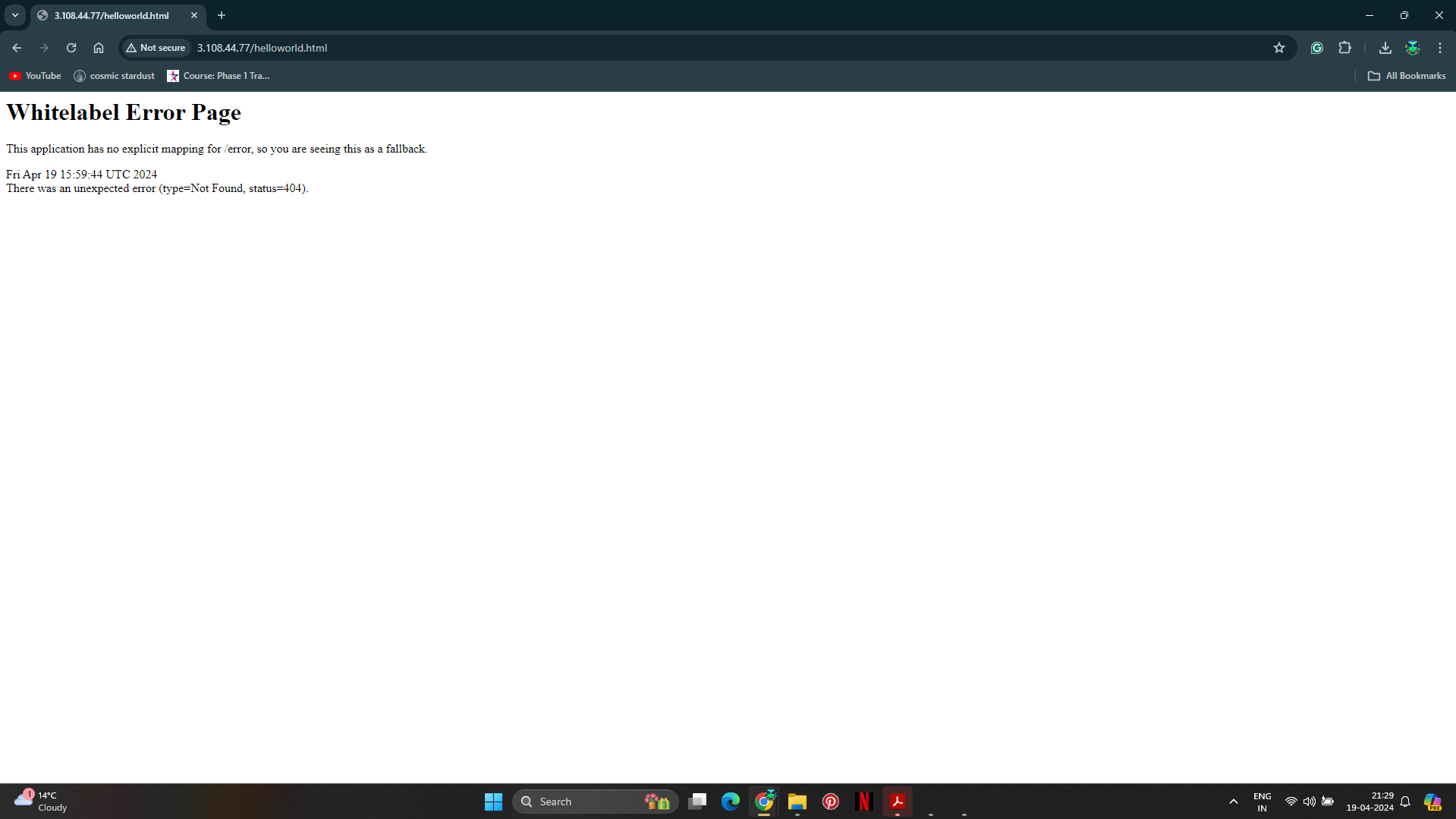
**Step 18: Rollback the Deployment to the Old Version**

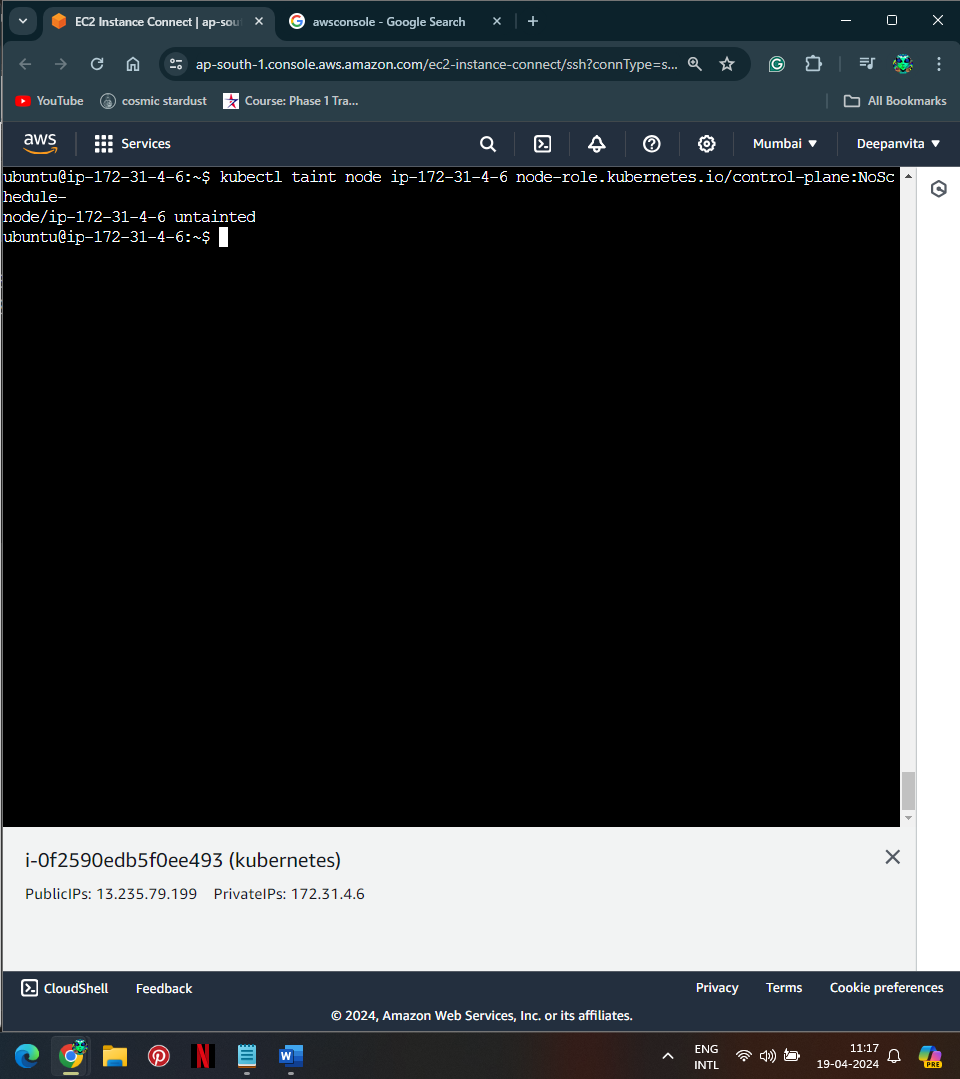
1. Rollback the deployment to the previous version:





**Step 19: Verify the Version and Try to Access helloworld.html**





Describe pod