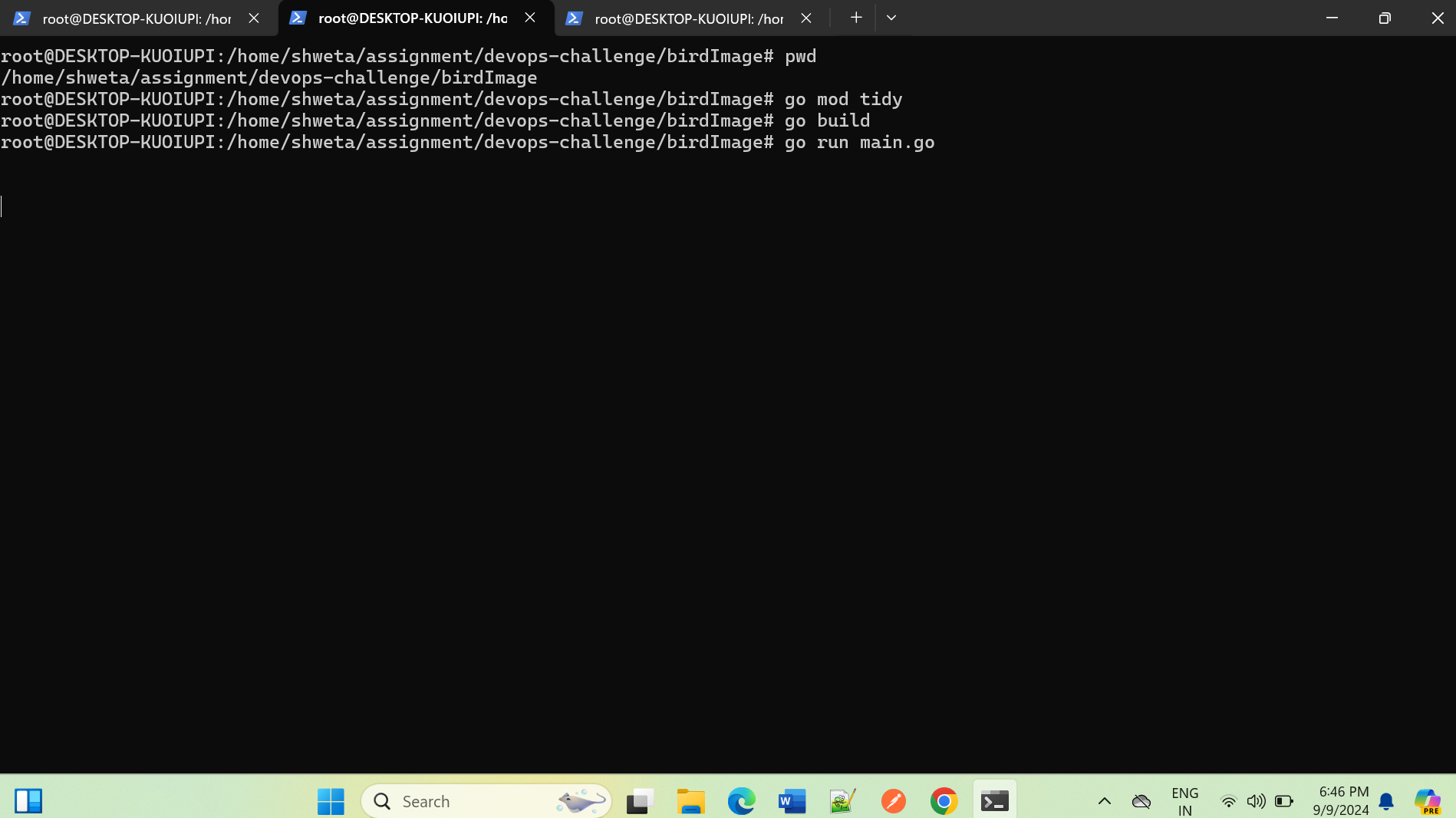
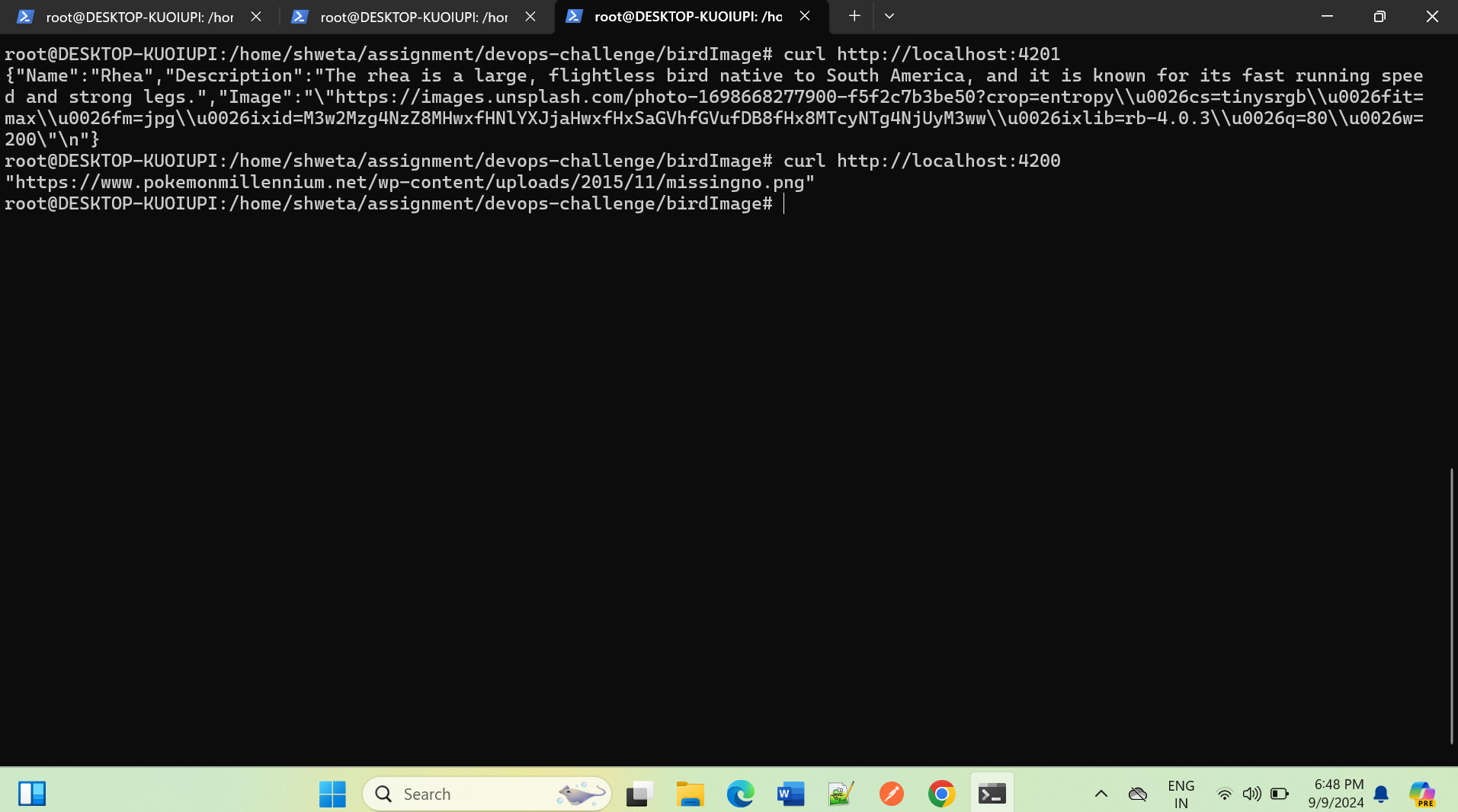
**BirdImage API DevOps Deployment**

Detailed solution provided throughout the code and necessary screenshots

* **Step 1 : Install and Run the App. (On Local through ubuntu system (using windows WSL utility))**

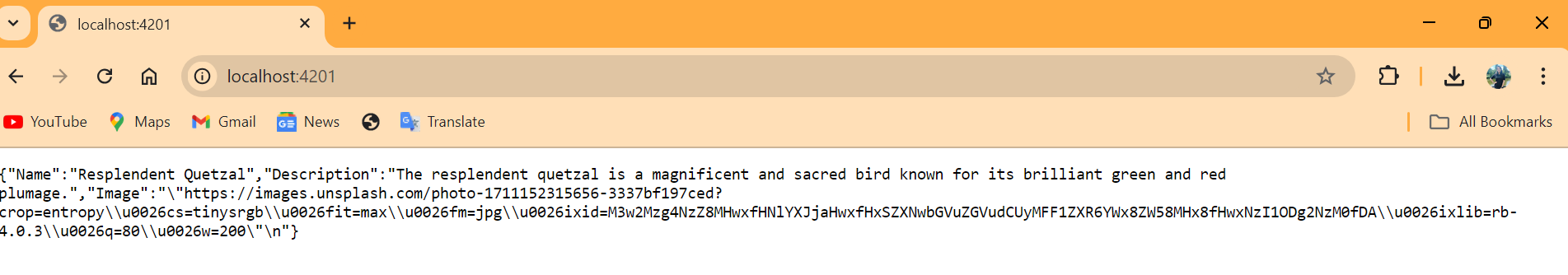


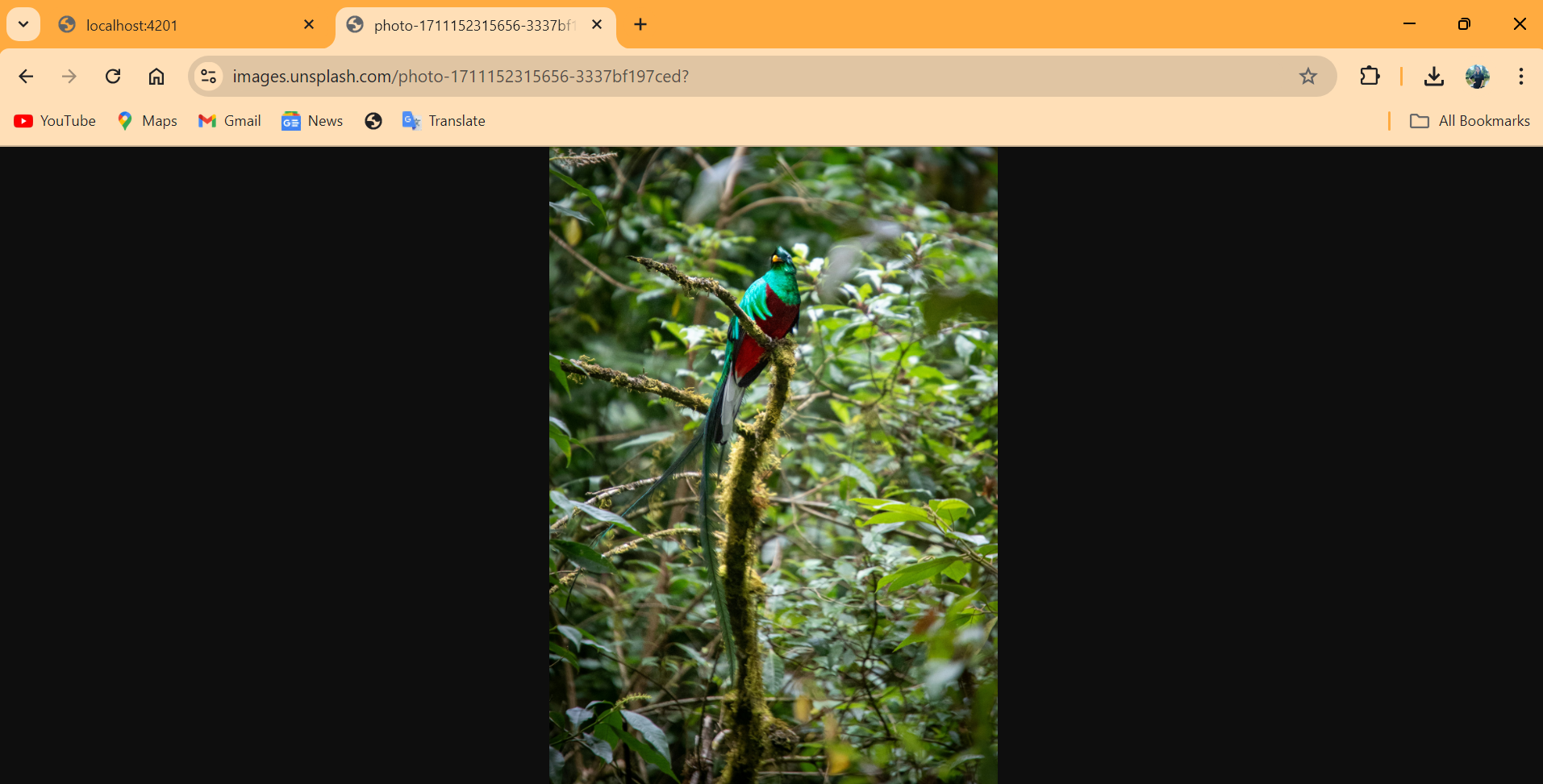
Ouput of API:



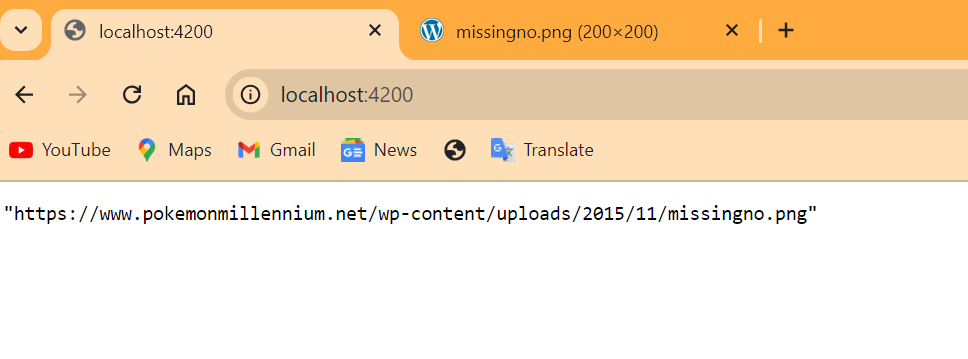
On browser:

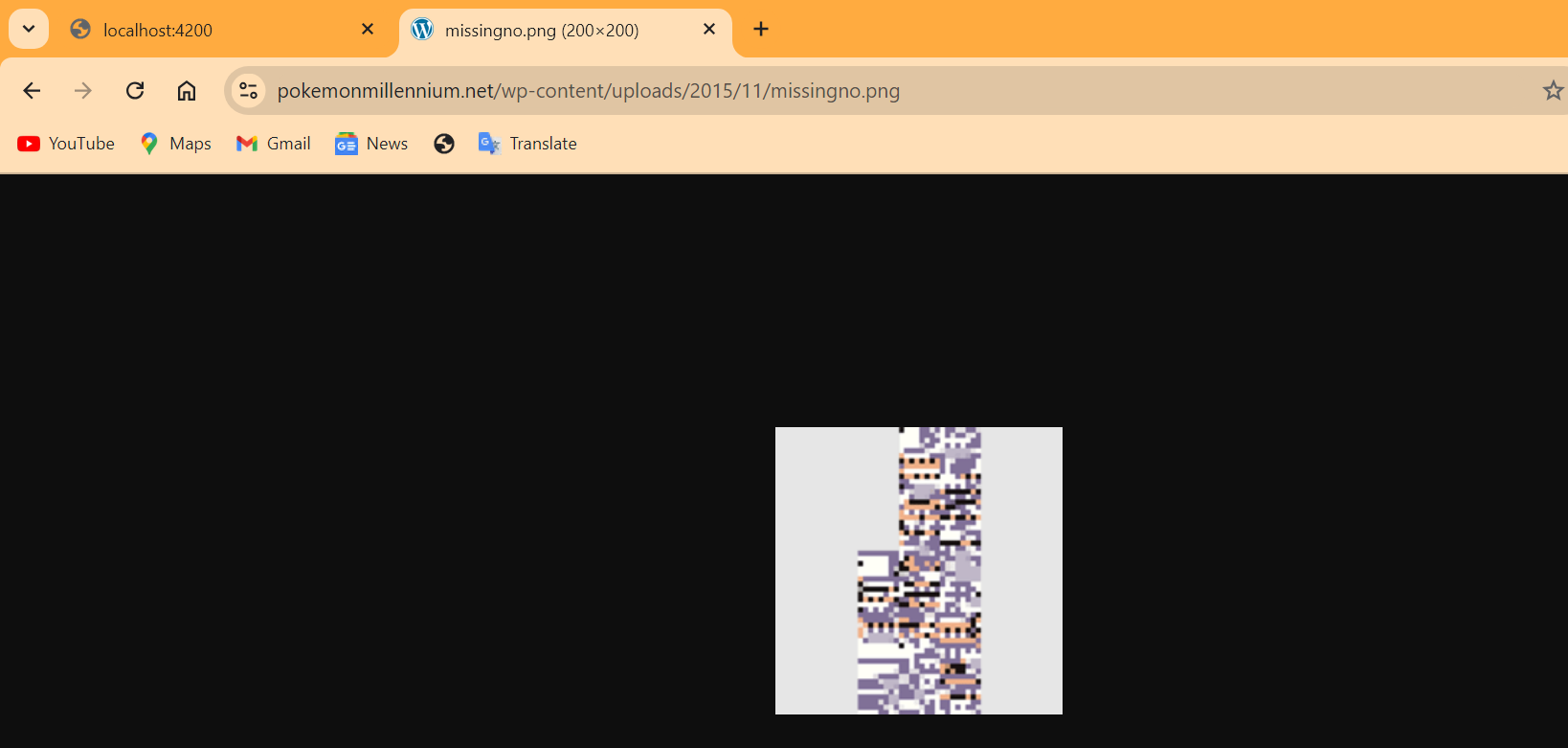
url: http://localhost:4201





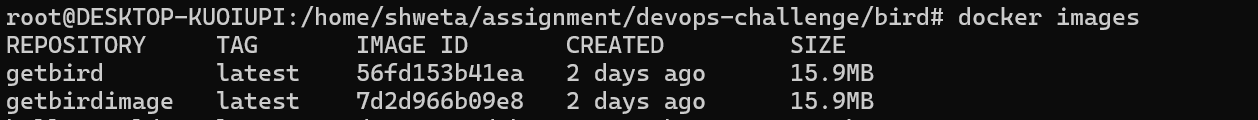
<http://localhost:4200> (BirdImage API)



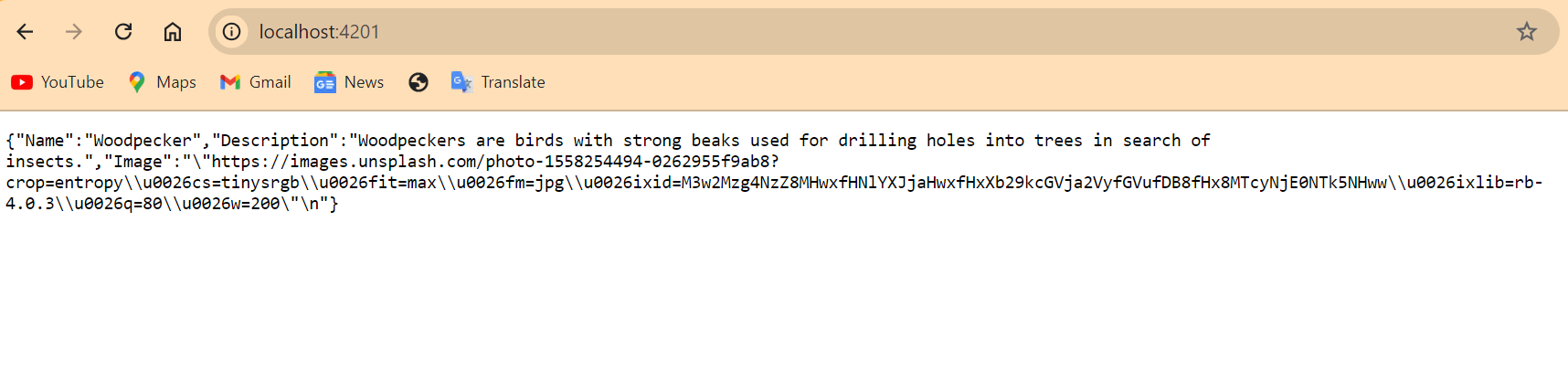


* **Step 2 : Dockerise it (create dockerfile for each API)**

Docker images:

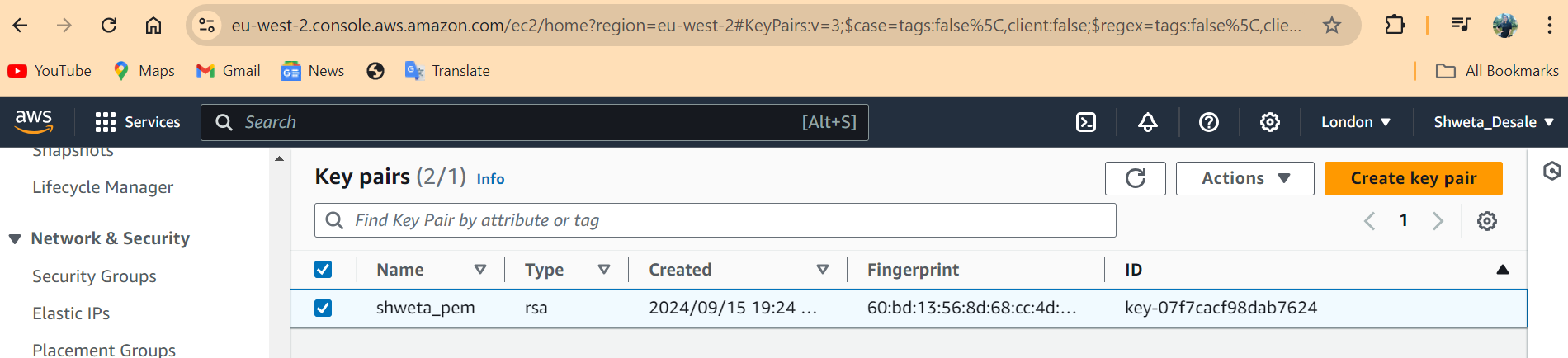


Running API through Docker containers:

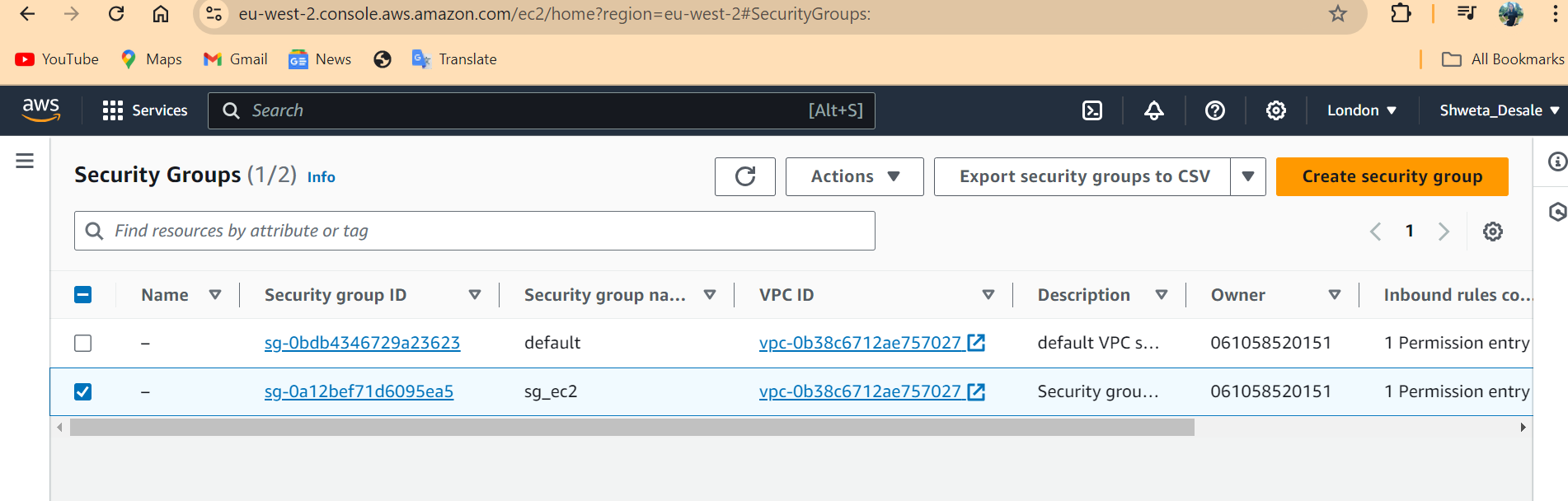


* **Step 3 : Creating infra AWS on IaC (Terraform):**

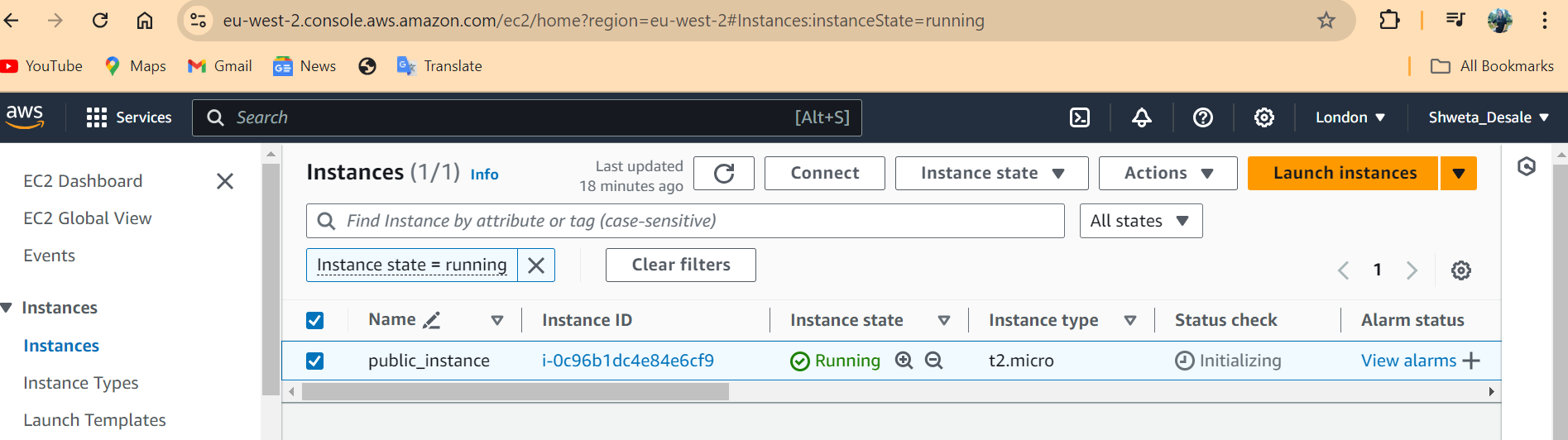
1. Key pair



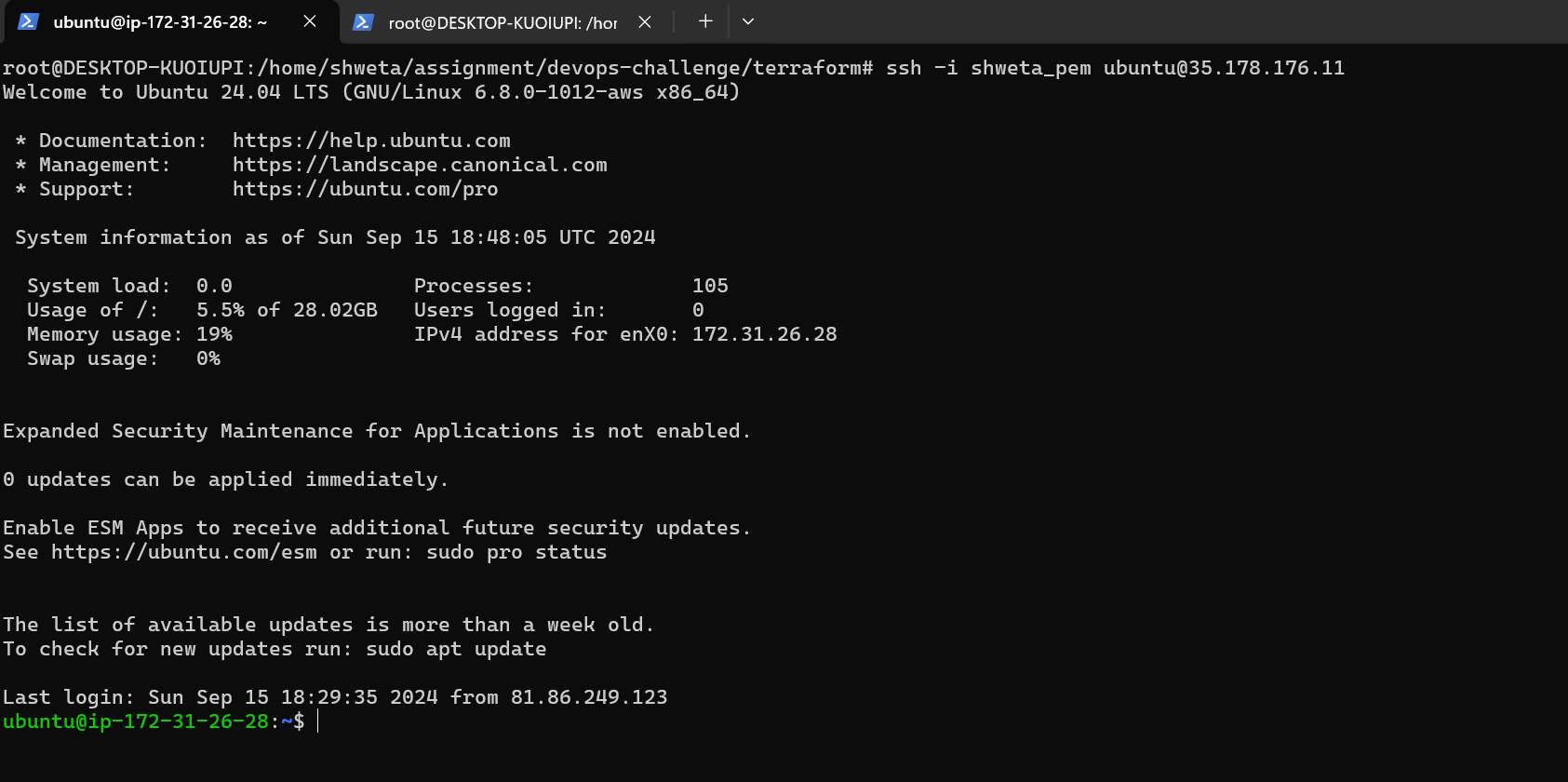
1. Security Group



1. EC2 instance :

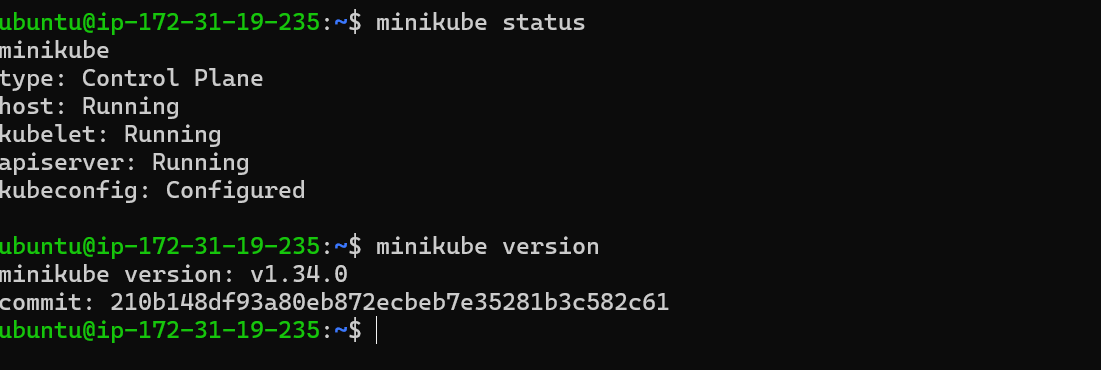


1. Accessing ec2 instance launched through terraform through SSH:



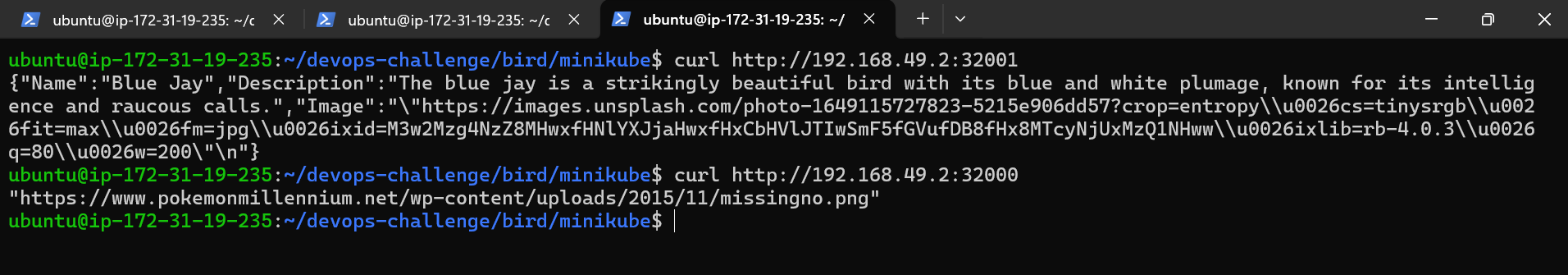
* **Step 4: Install a small version of Kubernetes on the instances (no EKS)**

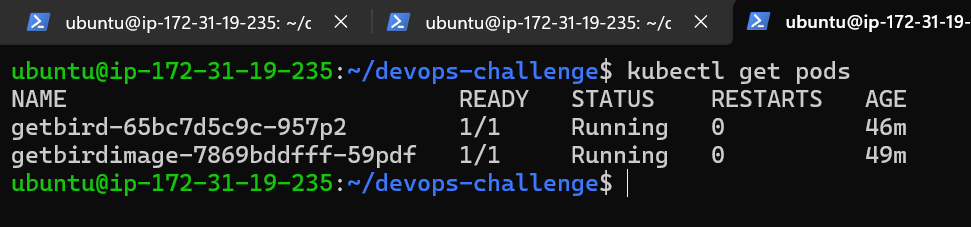
1. Minikube is installed on t2.micro instance launch through IaC.

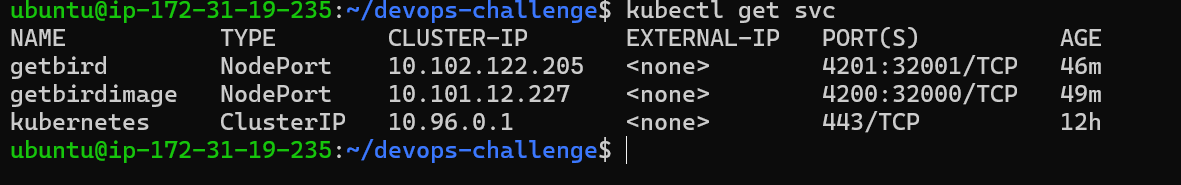


* **Step 5: Build the manifests to run the 2 APIs on k8s**

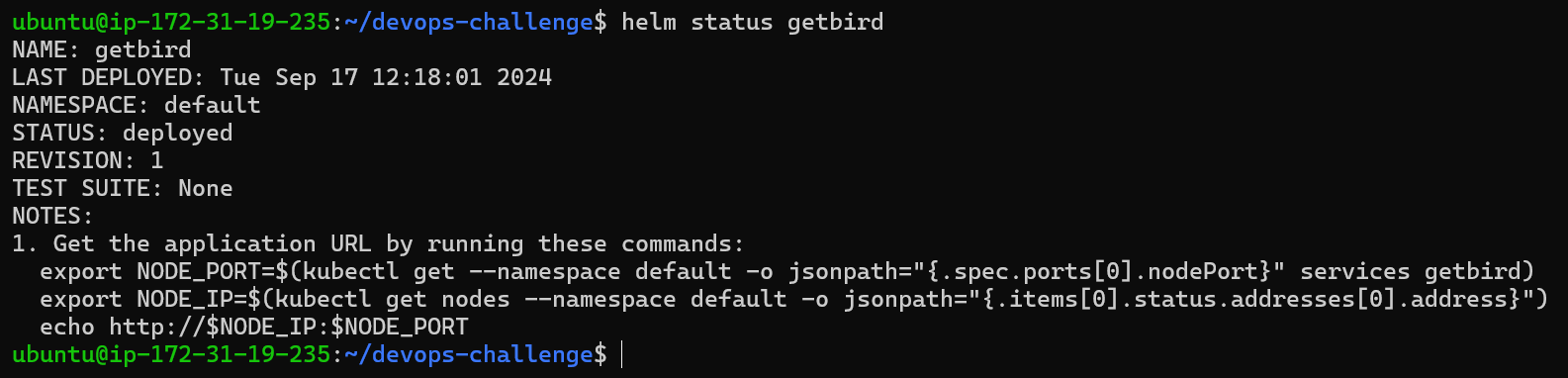
Deployment through kubernetes



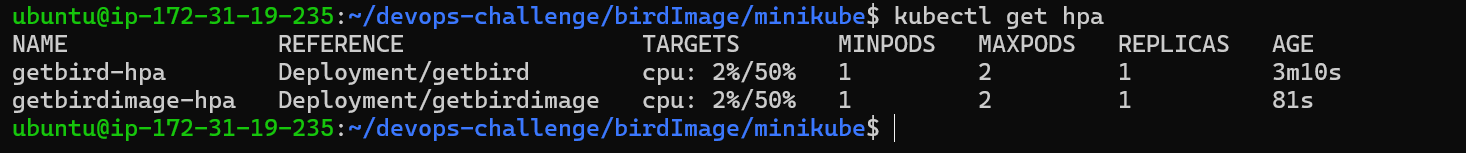




* **Step 6: Bonus points: observability, helm, scaling**
  1. Helm chart for getbird API:



* 1. Autoscaling for 2 APIs (HPA):



* 1. Limiting the resources in manifests:

