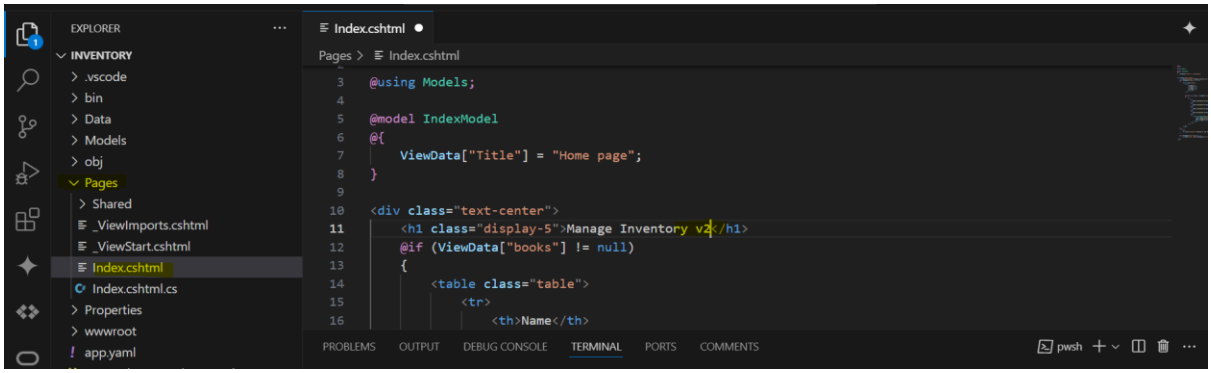
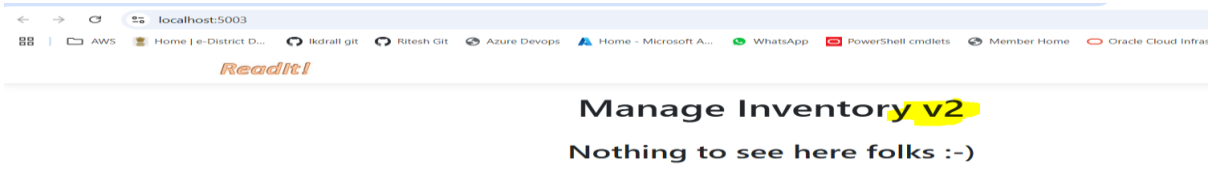
In this lab of GCP App Engine, we will create a new version of our app, and we will also test traffic splitting between versions

Creating Version: -

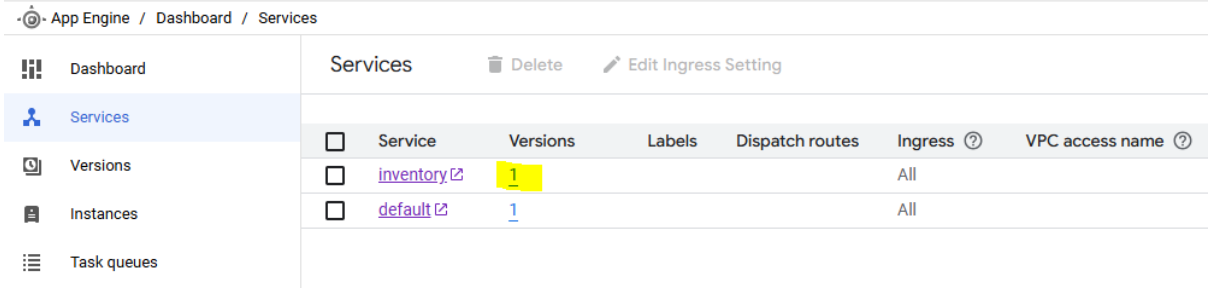
1. Open the same Inventory folder in VS Code that we used in the previous lab
2. Go to the index.cshtml file under the pages folder and add V2 in front of inventory at line 11.



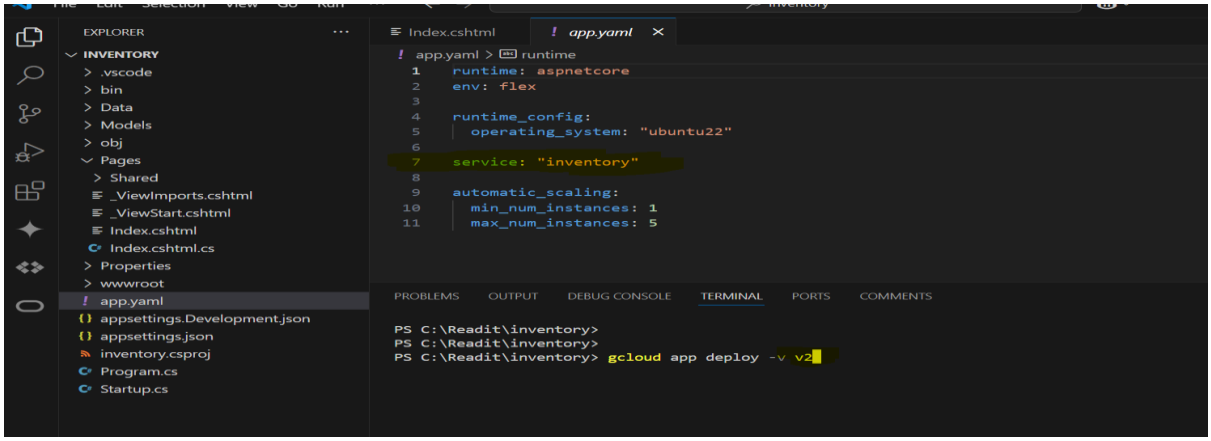
3. Hit F5 to test the code locally.
4. On completion, the webpage should show inventory v2 now, which is to distinguish the two different versions of our app.



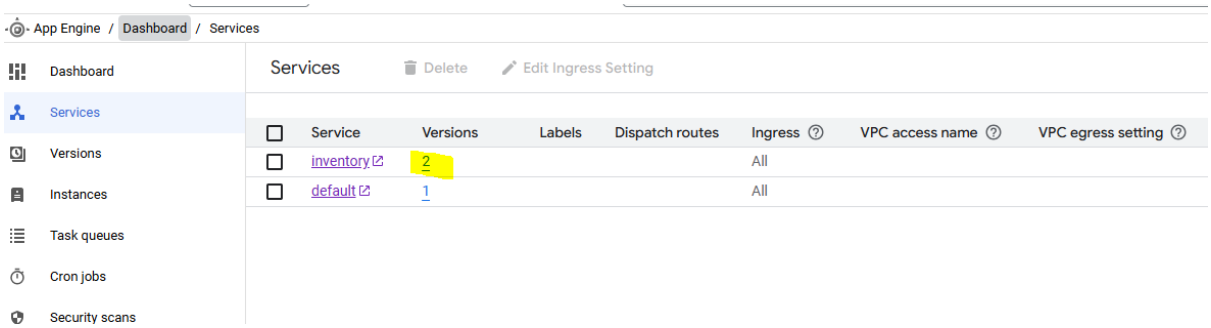
5. Go to the GCP console, and check Inventory shows only one version



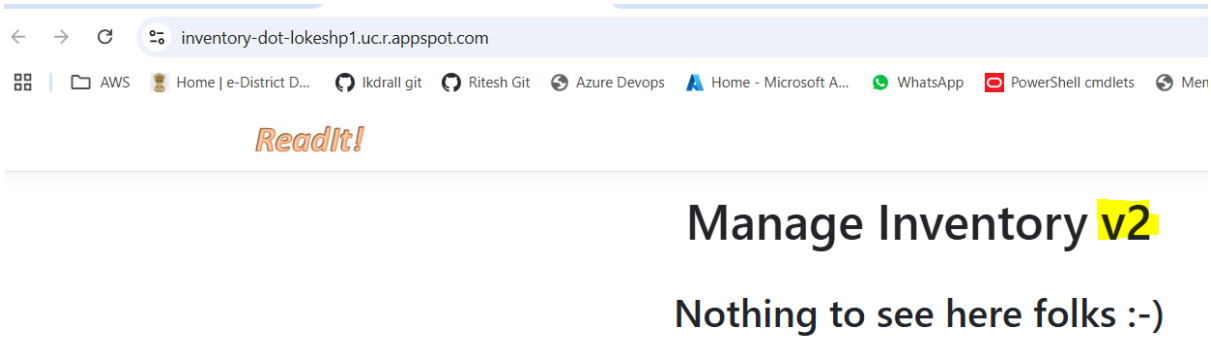
6. Run the command **gcloud app deploy -v v2**
   (Make sure the service name in app.yaml is the same as we used in the previous lab, only change the version to v2)



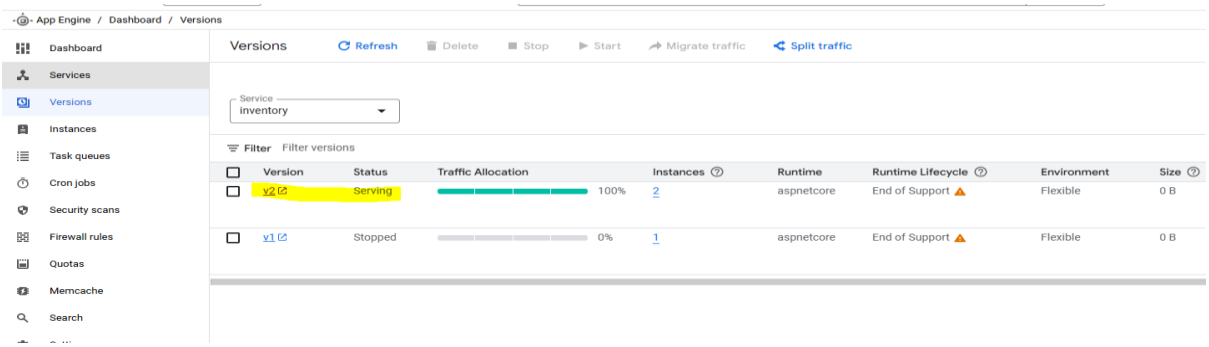
7. After completion, at GCP now it should now show 2 versions



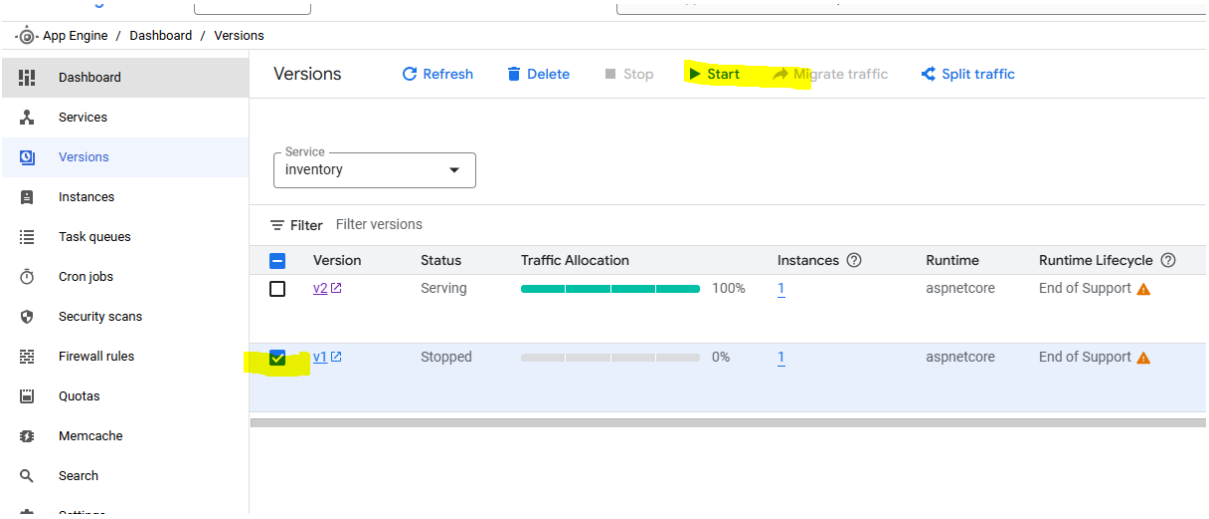
8. Click on the service name “inventory”, now it should open the v2 page. This also shows that by default, traffic is always moved to the latest version.



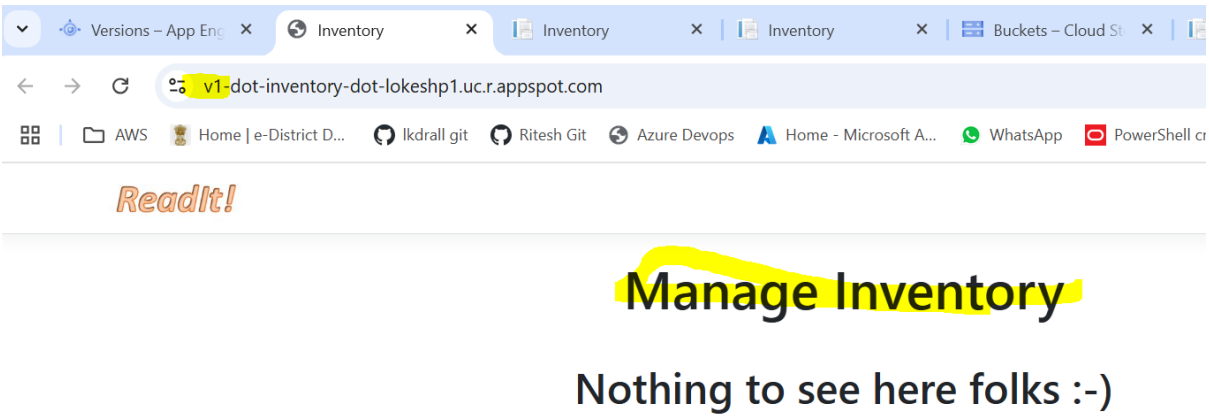
9. Go to versions, and there it will show that the status of v2 is serving and v1 is stopped



10. Select v1 and click Start to start the version for serving

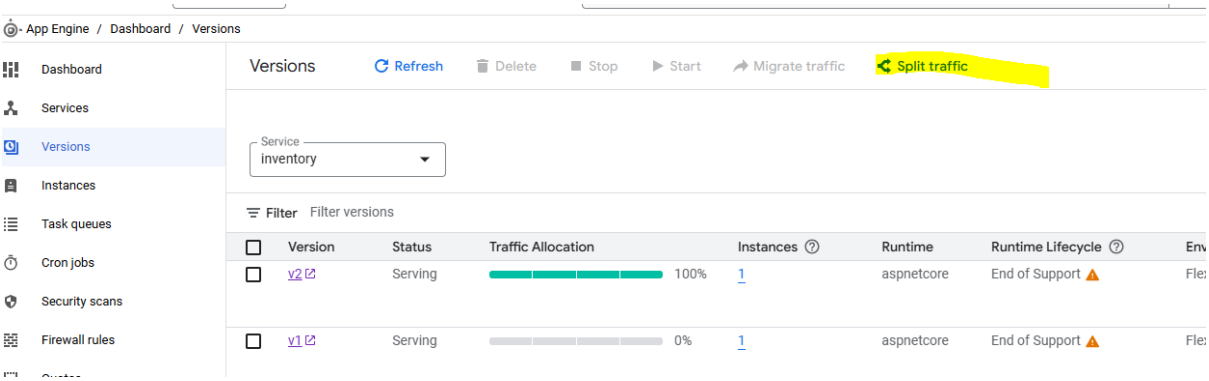


11. Wait for some time. And then click v1, it will open the version 1 webpage (without v2 written after inventory). Also note that the URL also shows the v1, but not the app name like previously, which was “https://**inventory**-dot-lokeshp1.uc.r.appspot.com/”. This is because only the default version shows the correct app URL.

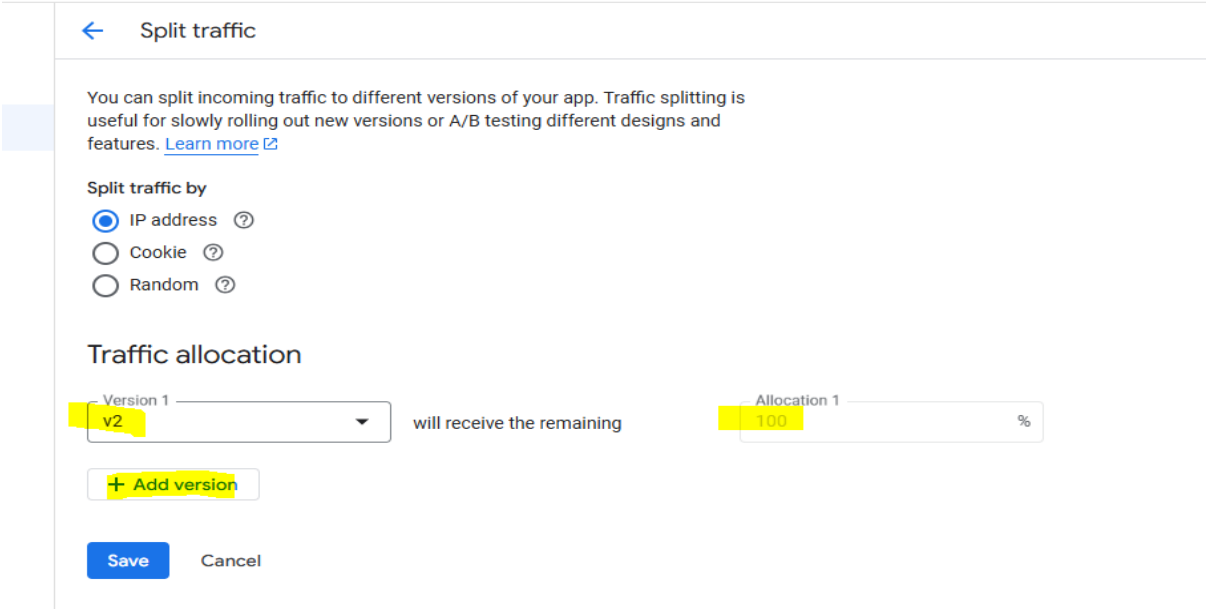


Traffic splitting:-

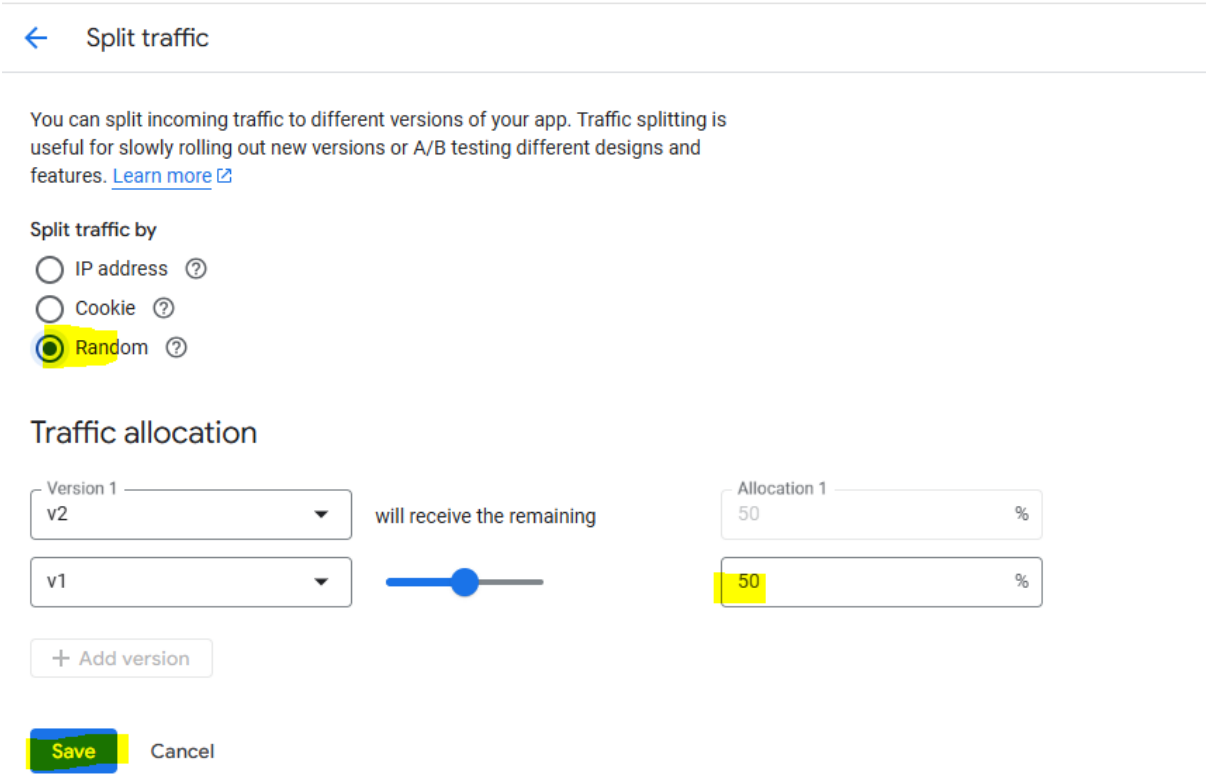
1. Click split traffic



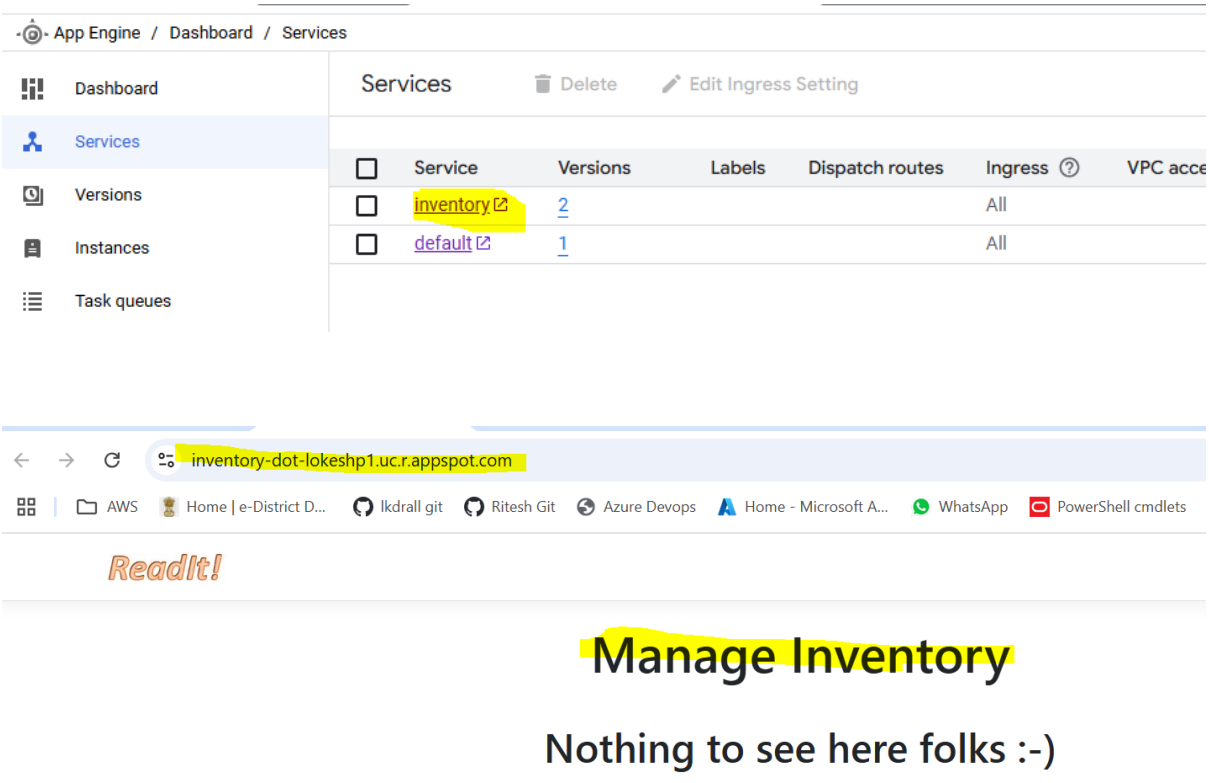
2. It shows 100% allocation to v2, click “Add version”

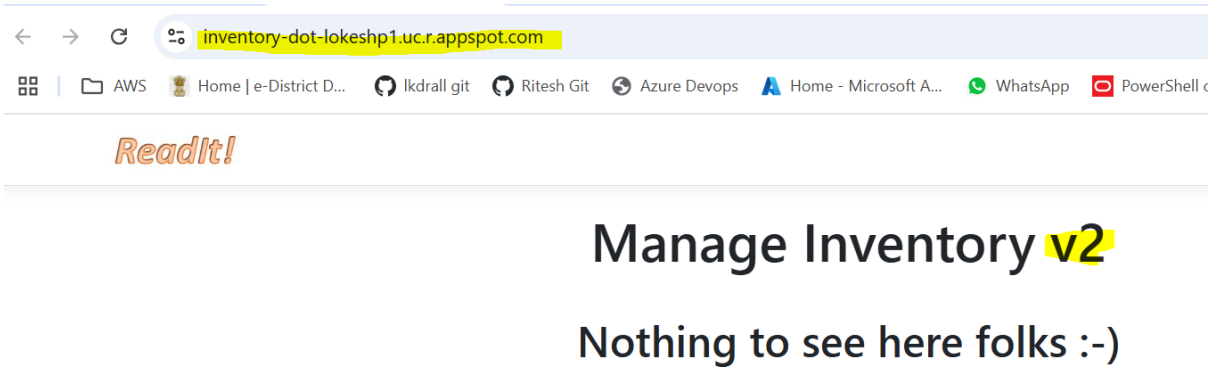


3. Select v1 and split to 50-50. Select “Random” split traffic for lab purposes
4. Also note, we can use an IP address (this will route traffic from a specific IP address to the same version every time and if we use Cookie, then that will save the cookie in the user's browser and will use the version accordingly in the future



5. Now go back to the Services page and open url by clicking the service name, this will open the app page again. Try refreshing the page again and again, and it will sometimes open v1 and sometimes v2, but the URL will remain the same.





6. Once the lab is completed, make sure to delete the traffic splitting by removing v1.