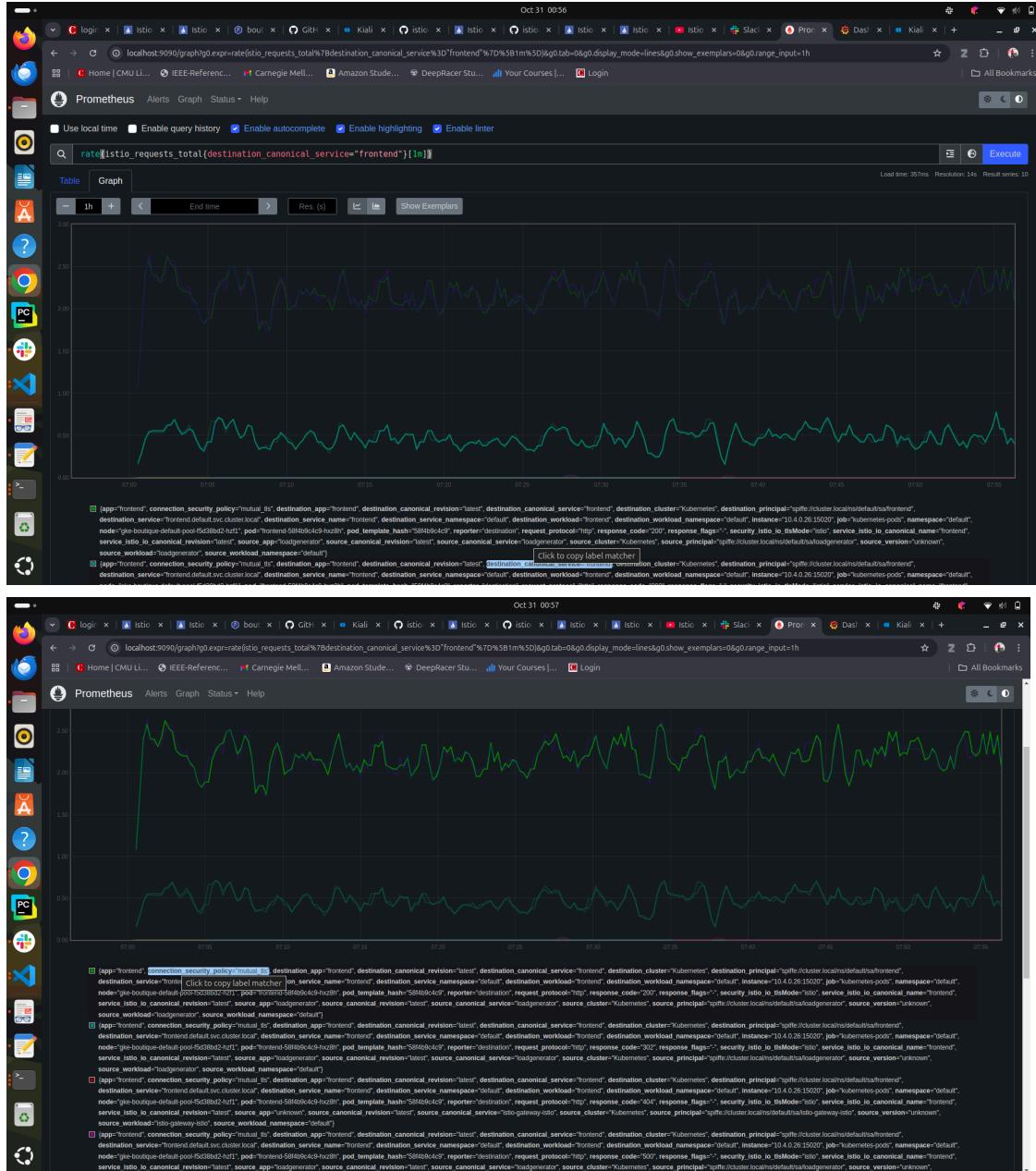
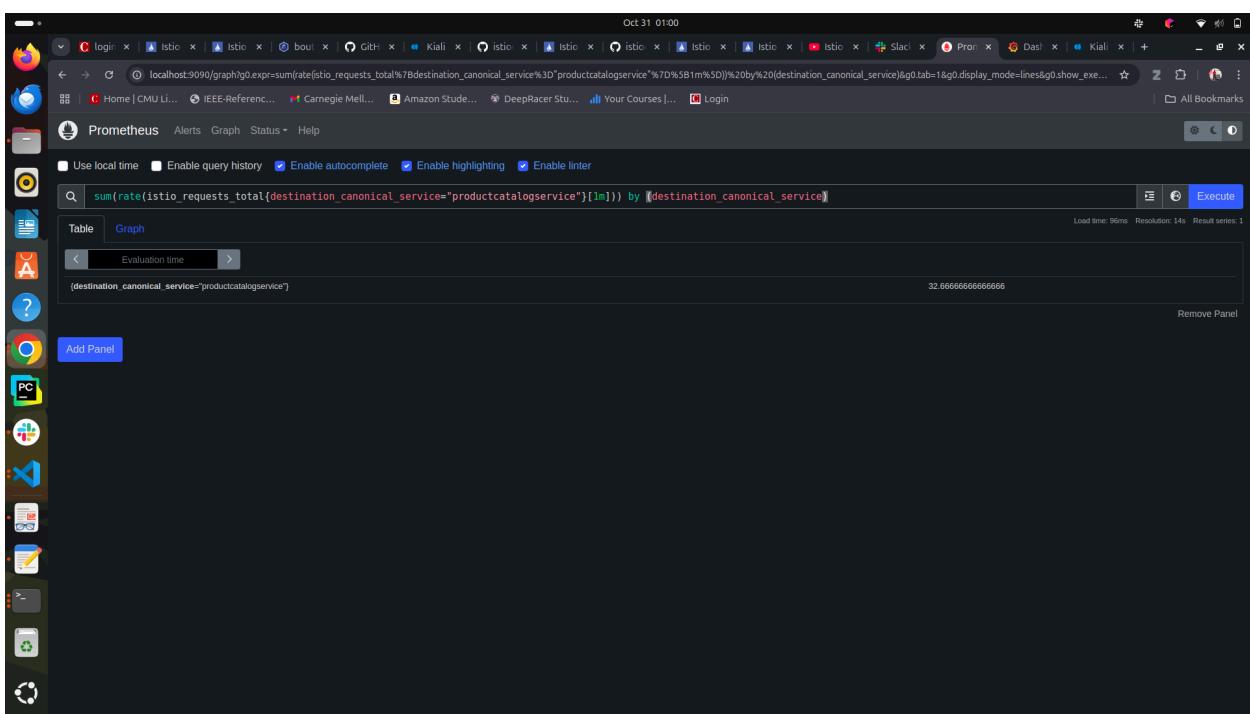
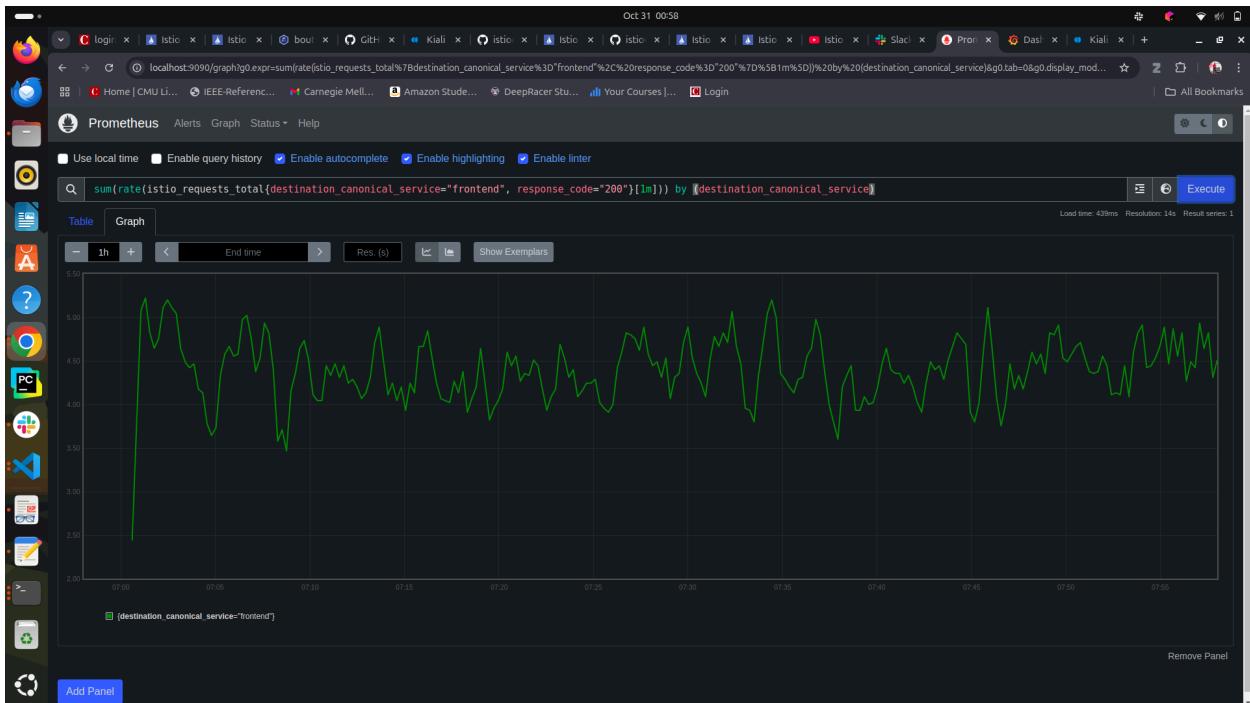


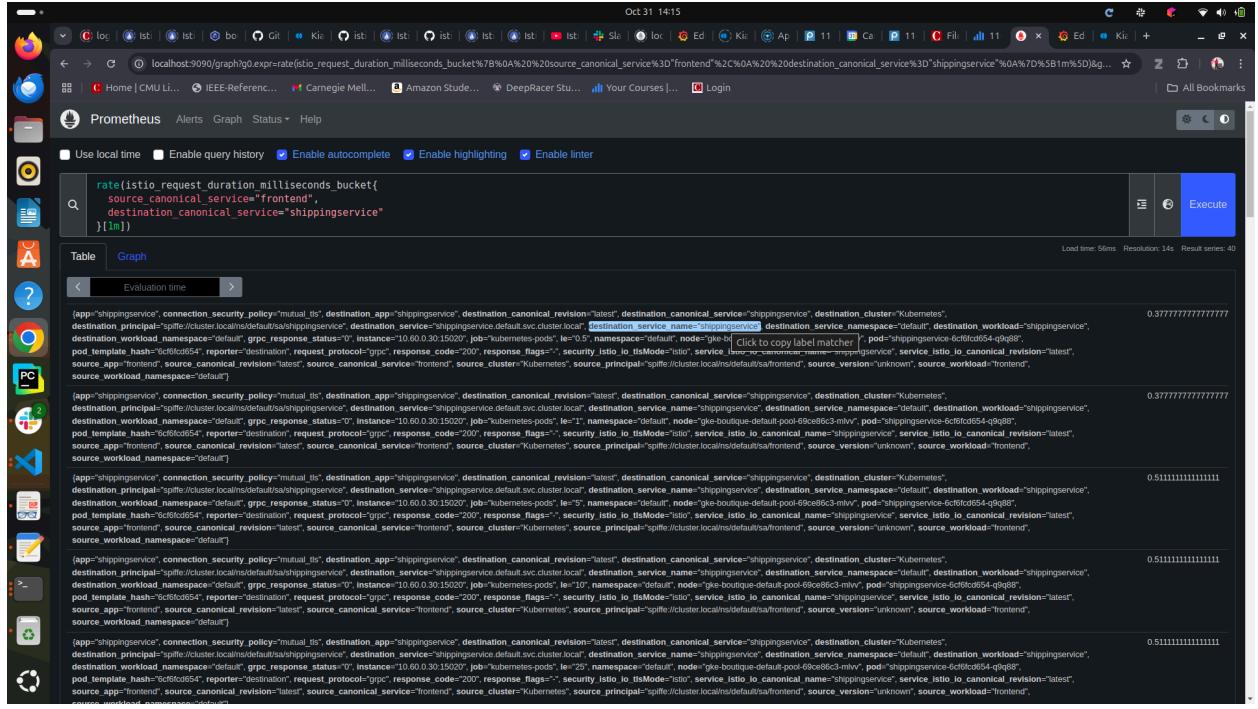
AIOPS - LAB6 : You can find more screenshots in the three folders task1 to task3

1. Task 1 -- screen shot of rate or increase in Prometheus graph tab

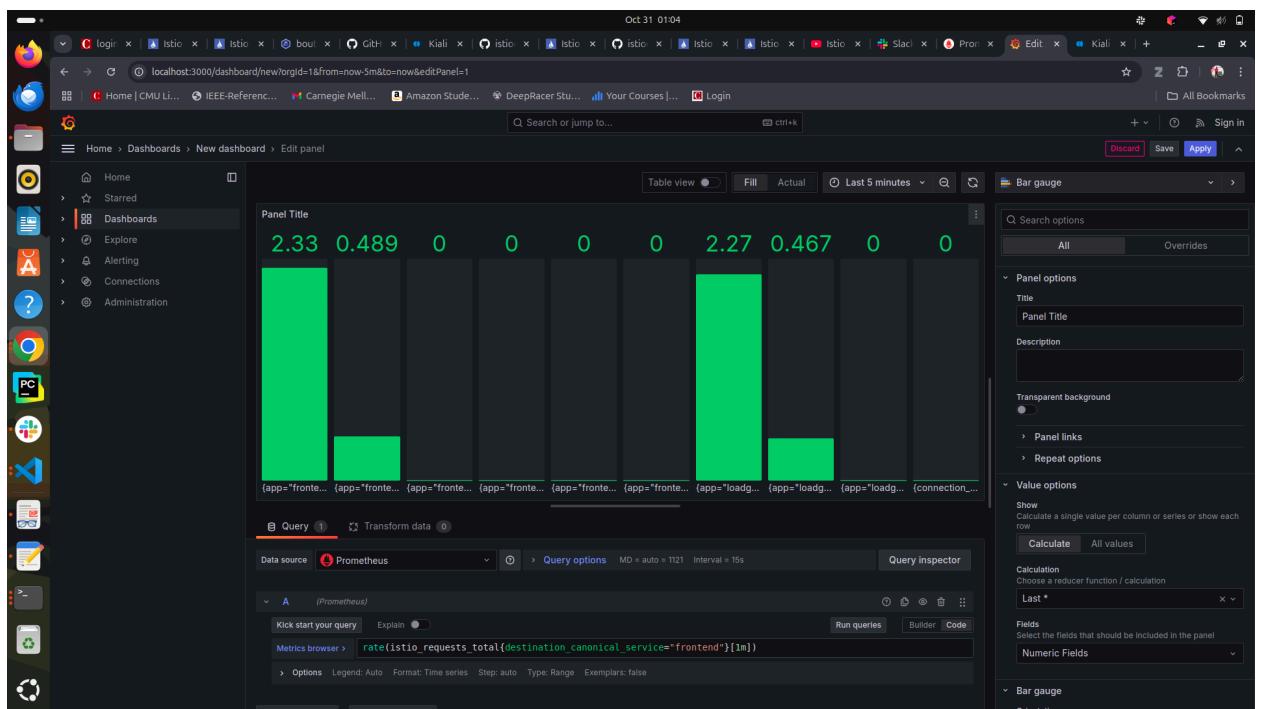
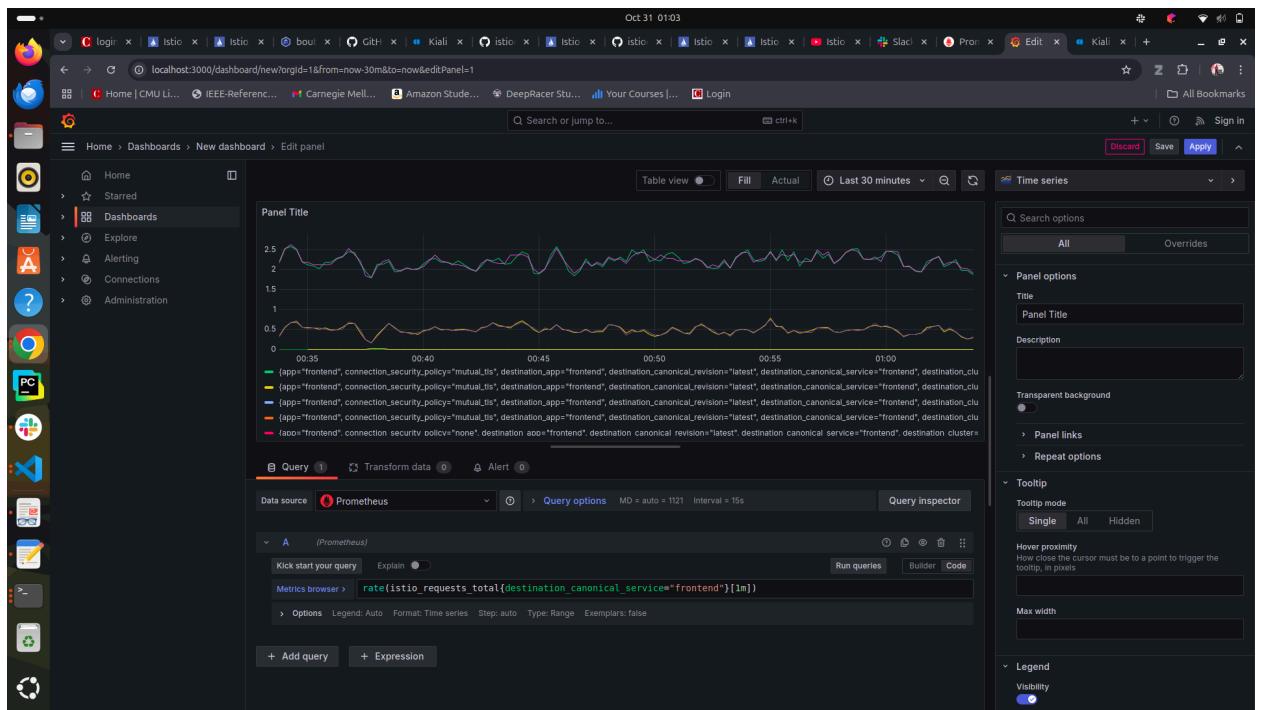
Take the rate or increase and show that in the Prometheus Graph tab. Play with clicking on the labels below the graph so you turn on just one at a time and explore. Take a screen shot of this graph for submitting in your lab report.

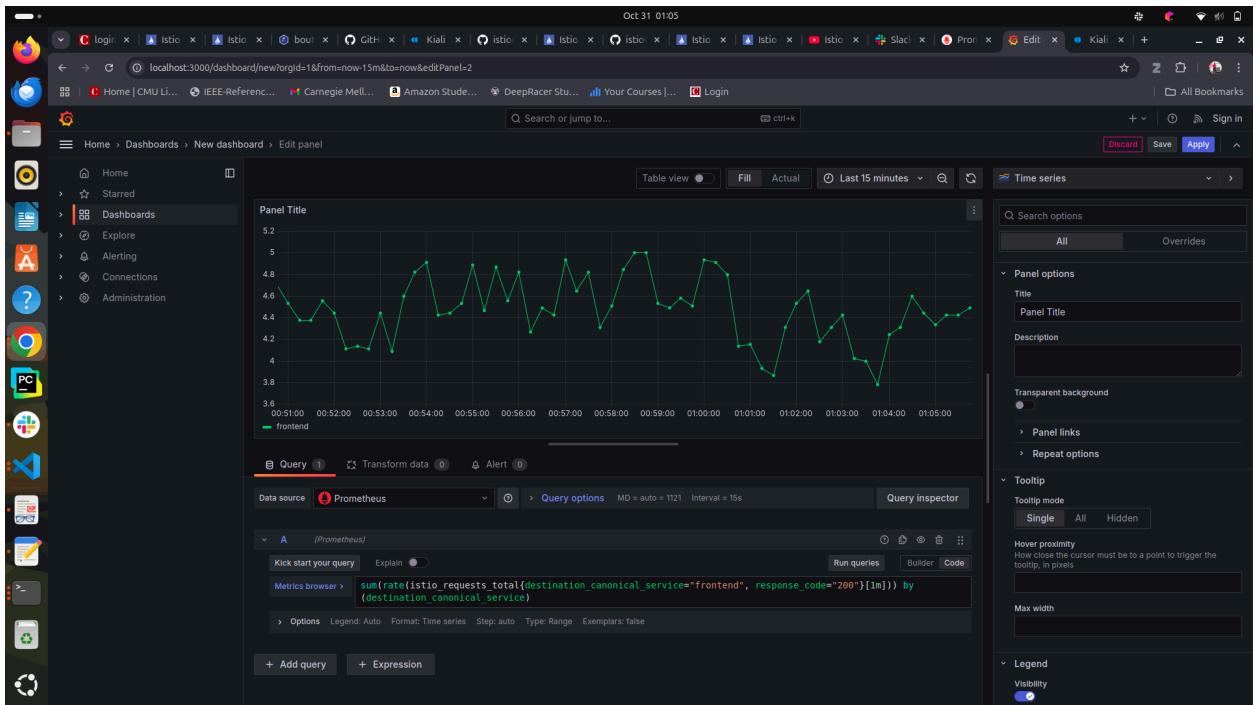






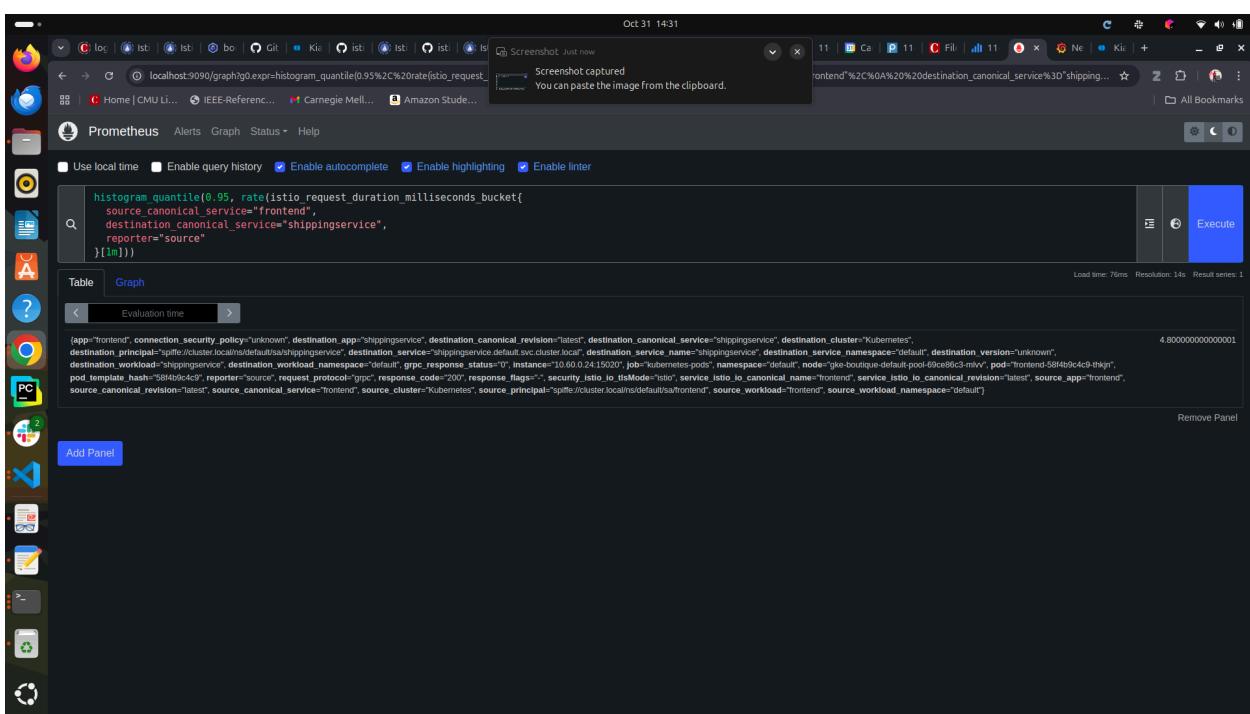
Create a Grafana visualization for the same graph just entered in Prometheus and submit its screen shot as well.





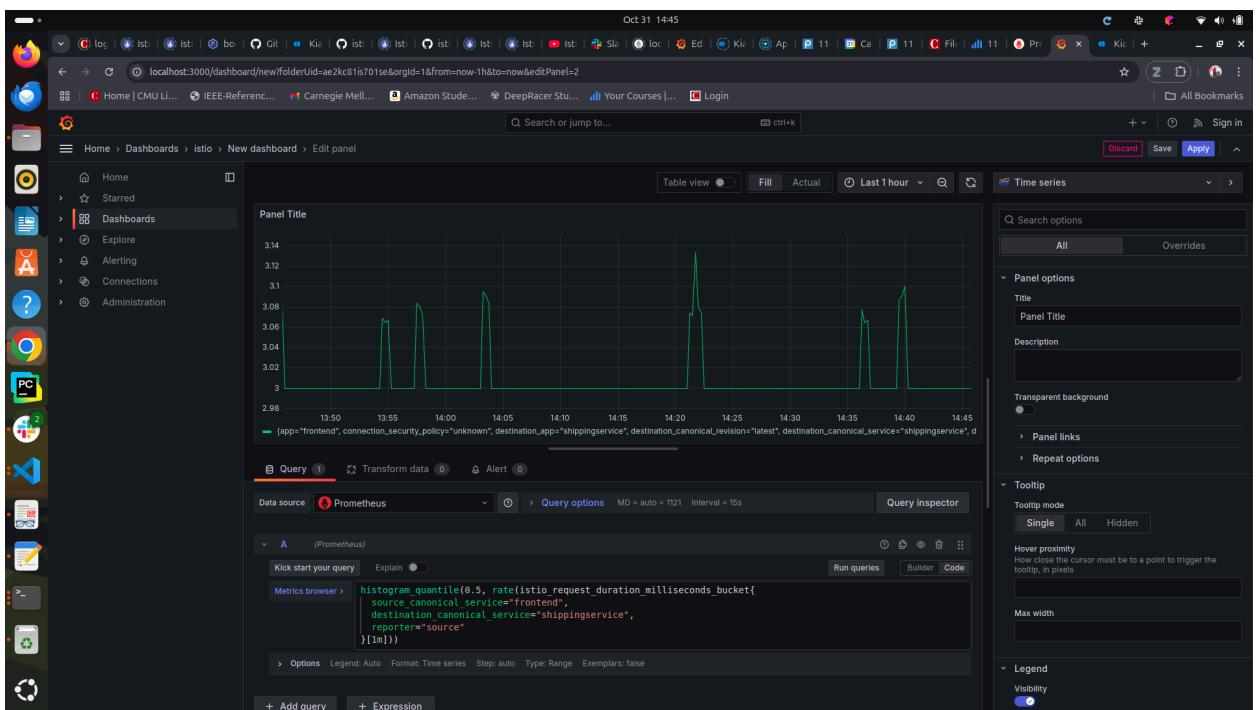
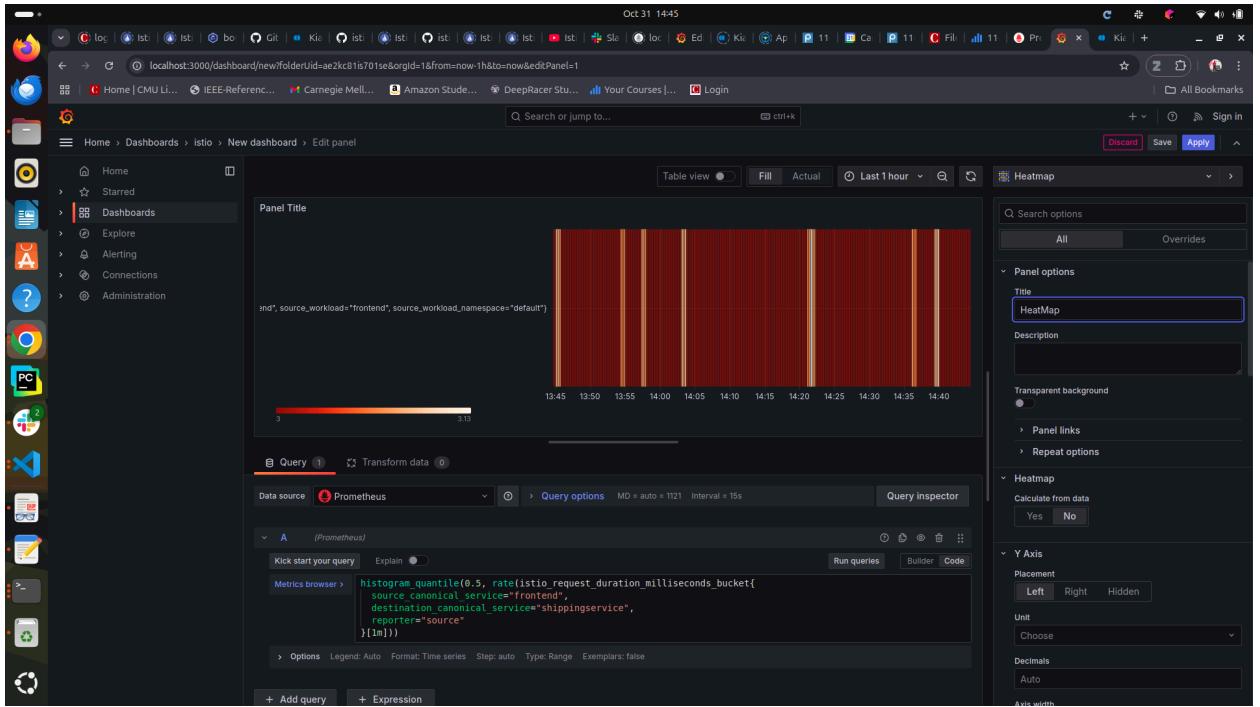
Compute the histogram_quantile at the 0.5 level and graph in Prometheus. Submit this screen shot.

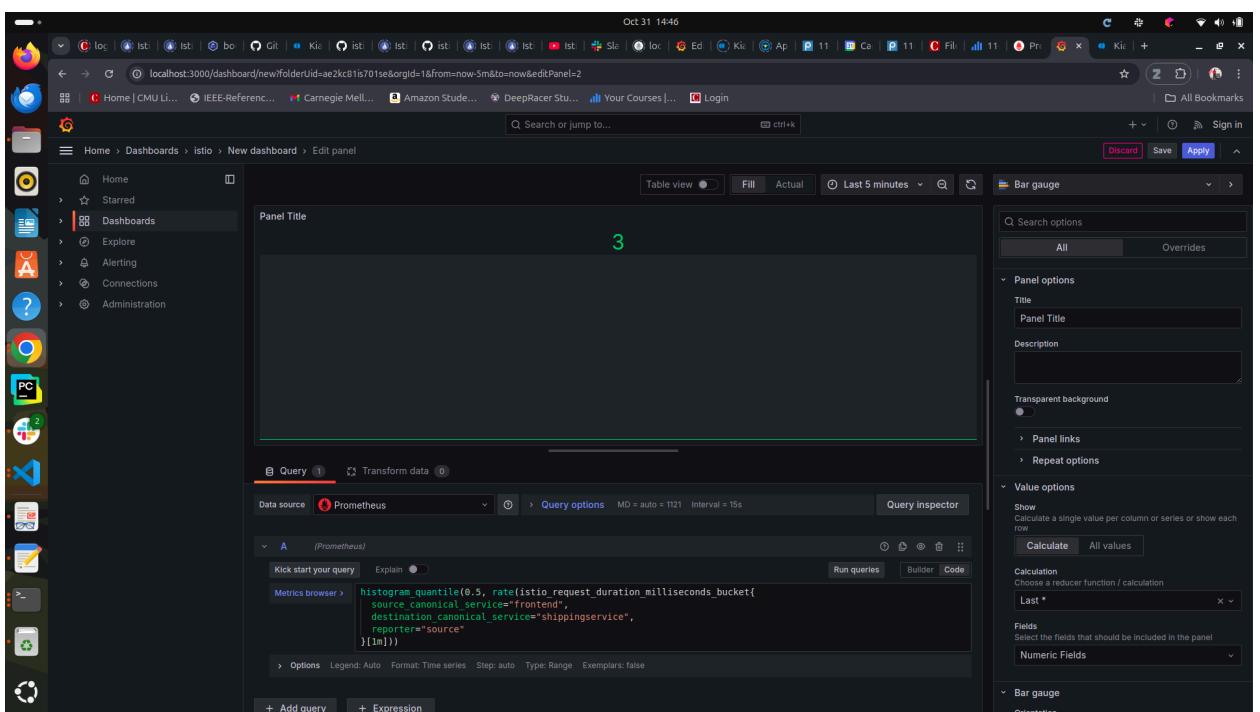
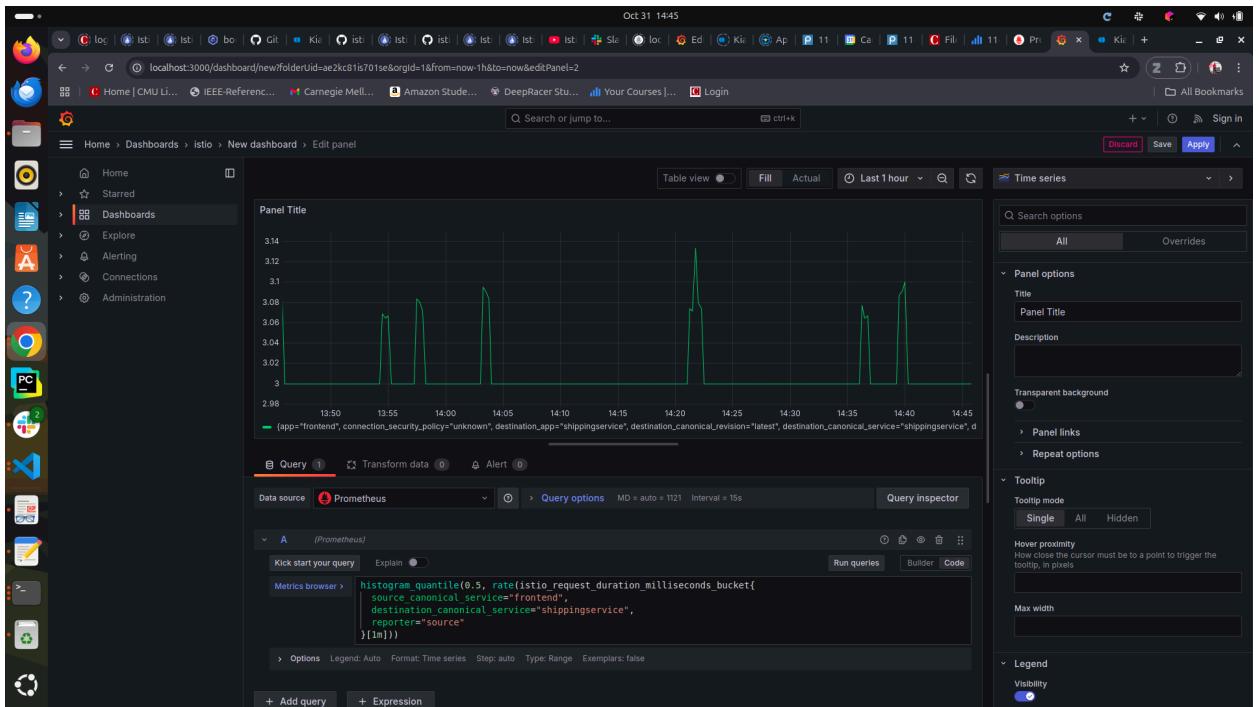


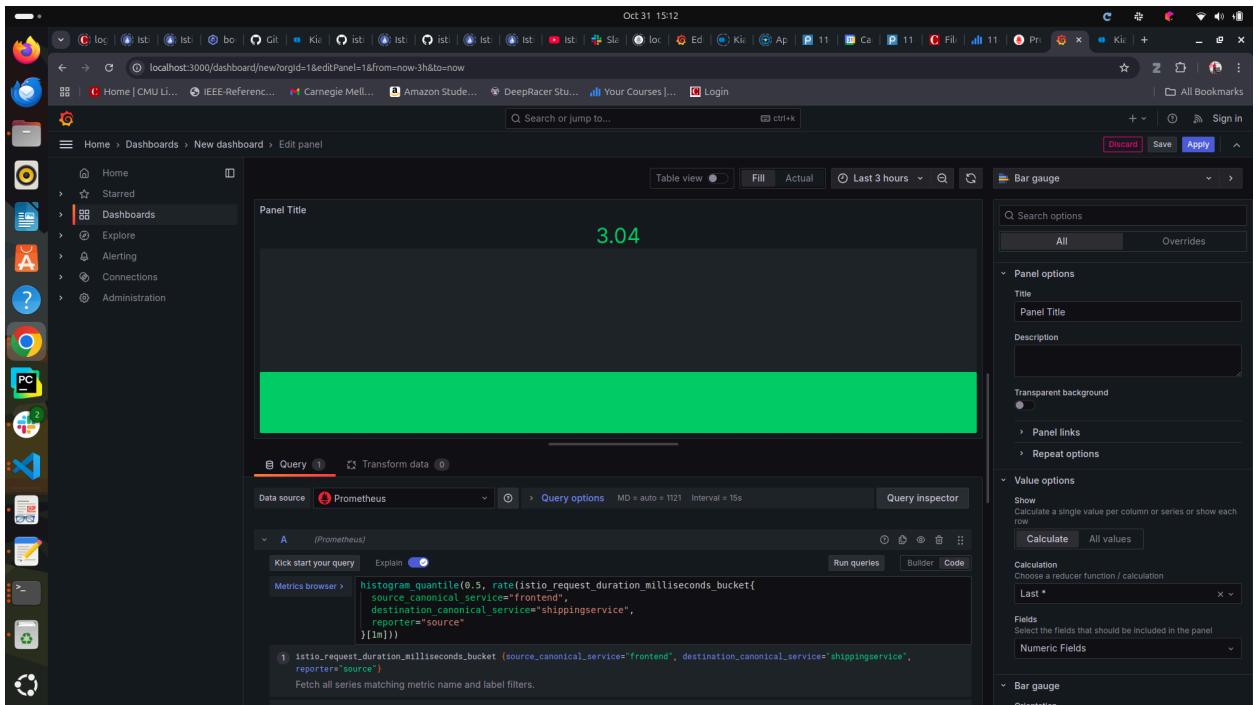




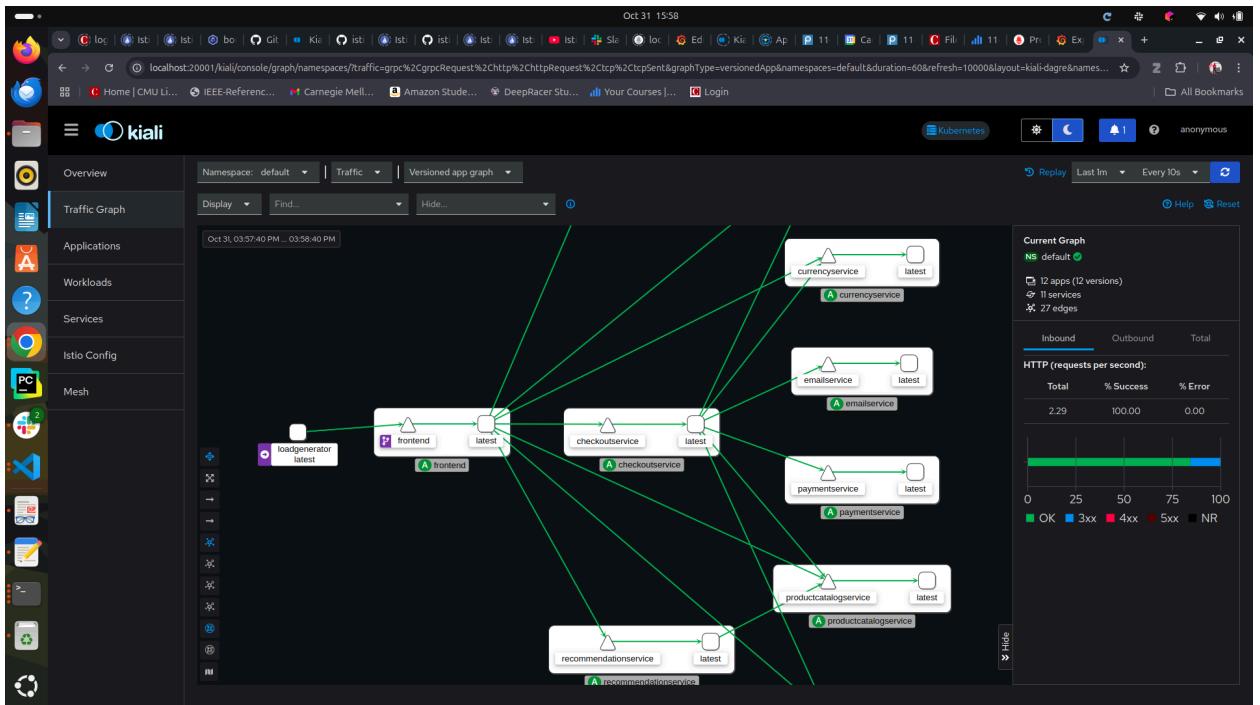
screen shot of the two displays (request count time series and duration histogram) in Grafana

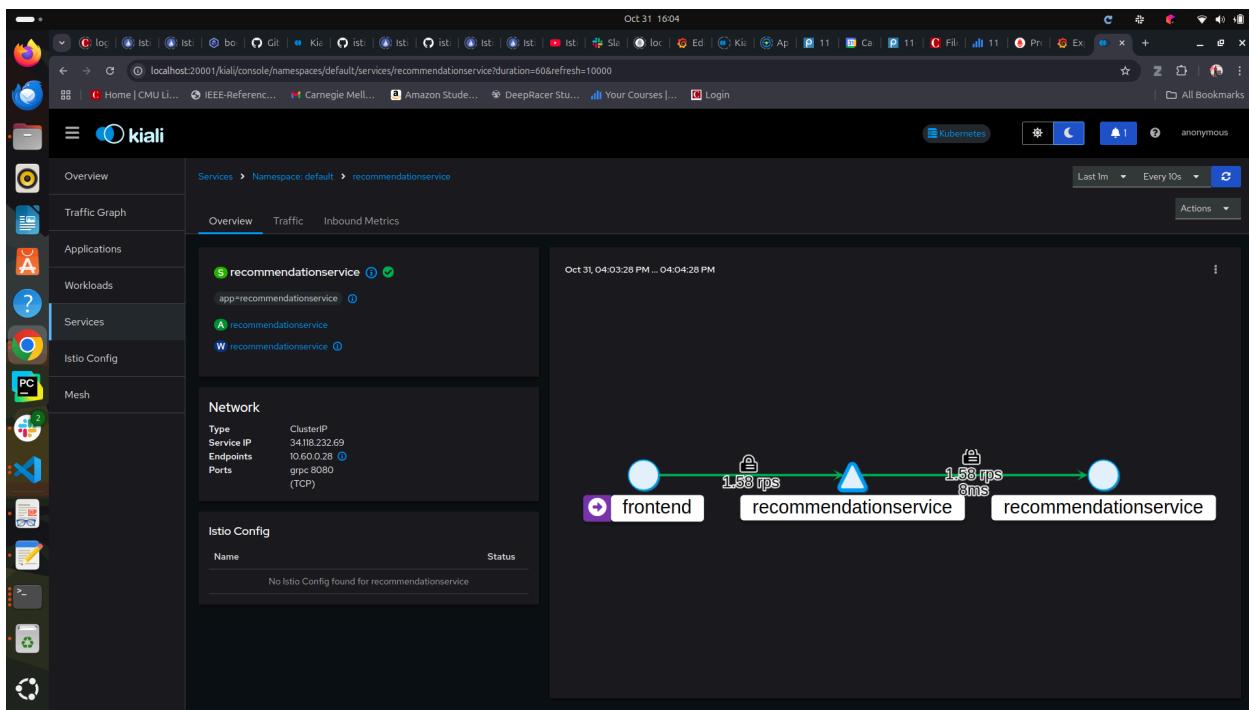
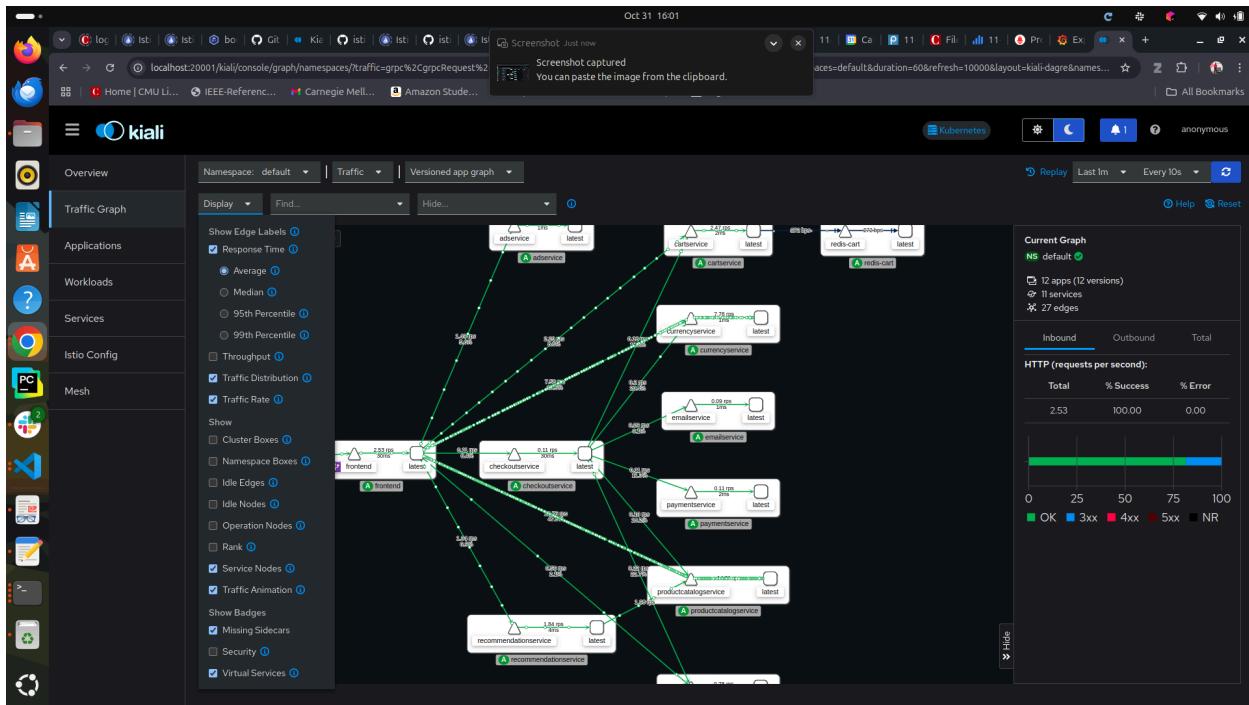






2. Kiali UI exploration screen shots





Oct 31 16:05

localhost:20001/kiali/console/namespaces/default/workloads/checkoutservice?duration=60&refresh=10000

kiali

Overview | Traffic Graph | Applications | Workloads | Services | Istio Config | Mesh

Workloads > Namespace: default > checkoutservice

Overview | Traffic | Logs | Inbound Metrics | Outbound Metrics | Envoy

Last 1m | Every 10s | Actions

checkoutservice (1 green, 2 red)

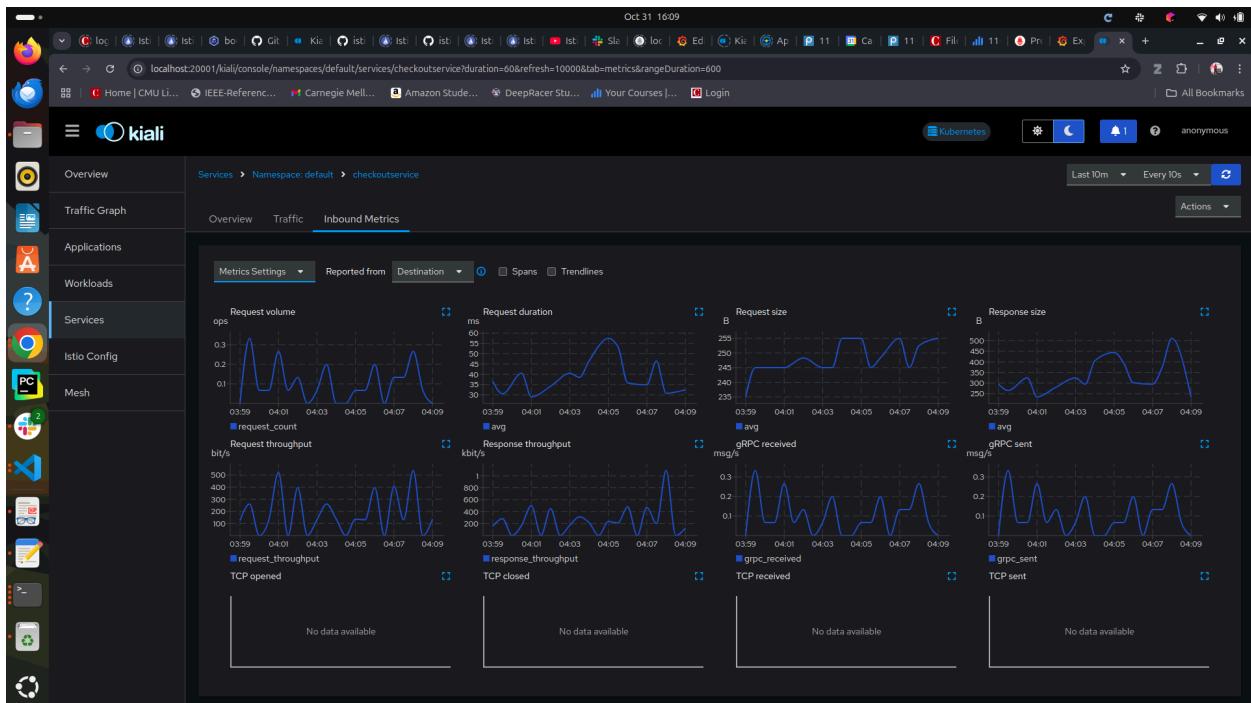
- app=checkoutservice (1)
- A checkoutservice (2)
- S checkoutservice (1)

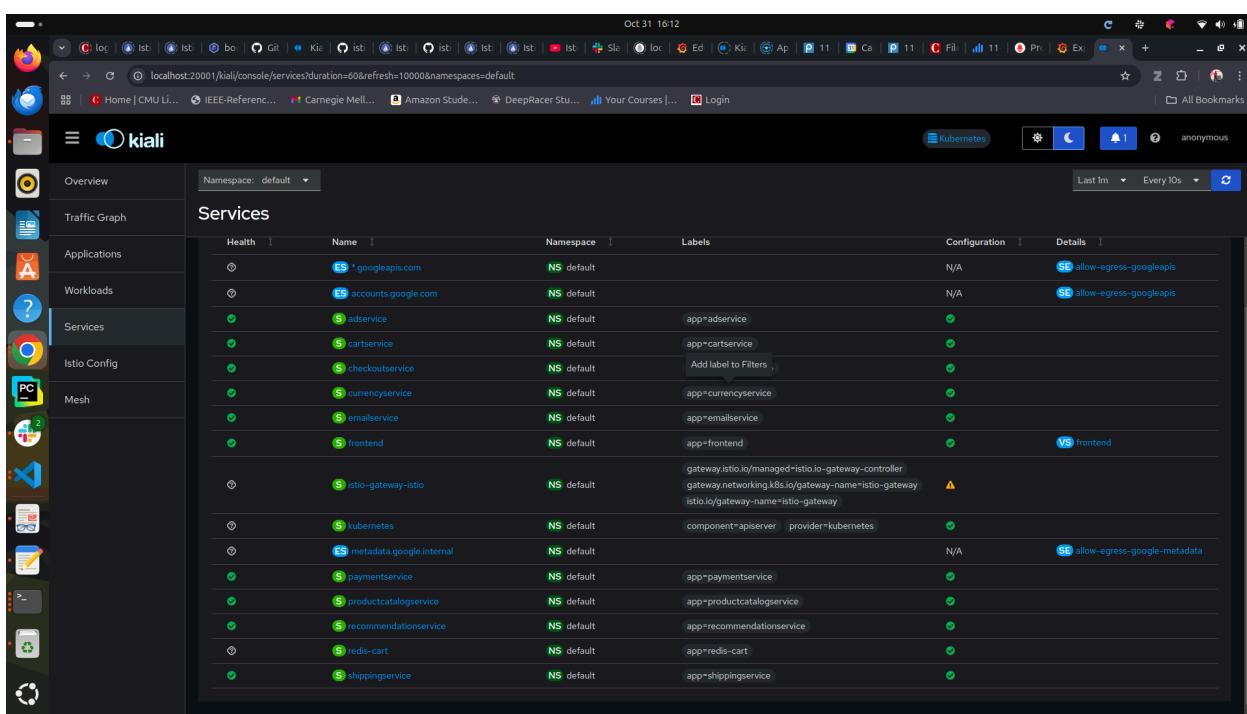
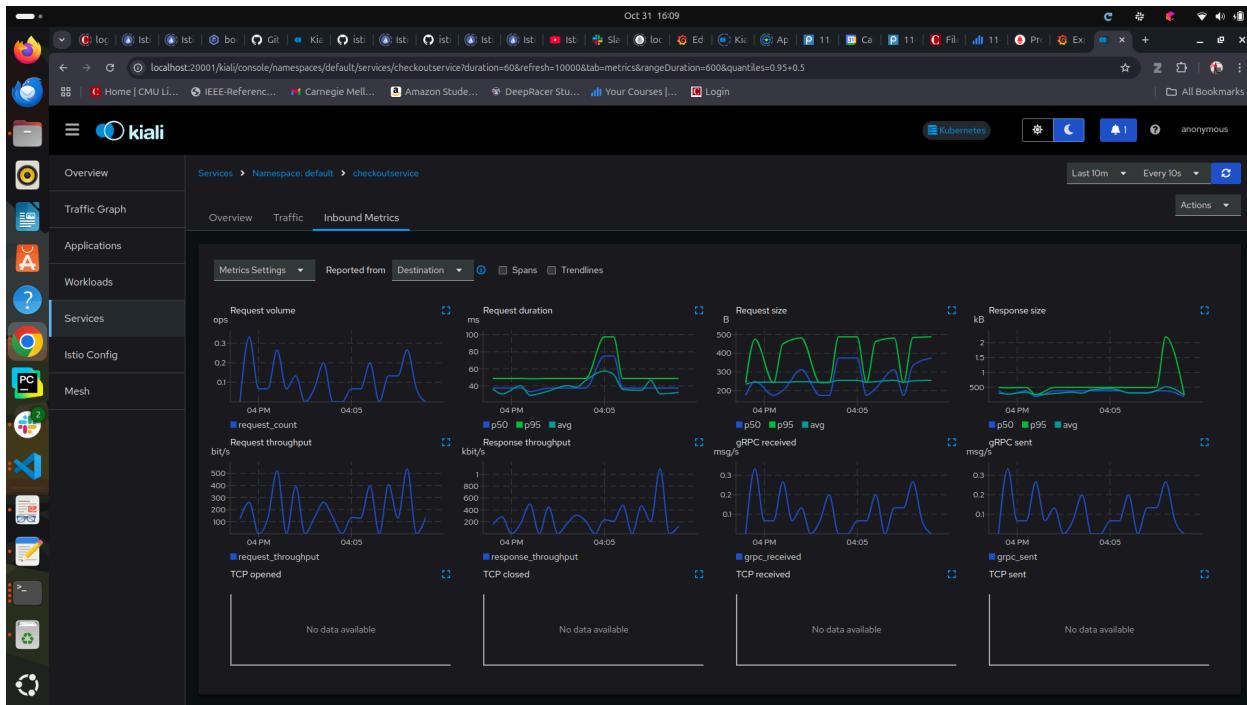
Pods

Name	Status
checkoutservice-799bf957b-qvlgz	⚠️

Istio Config

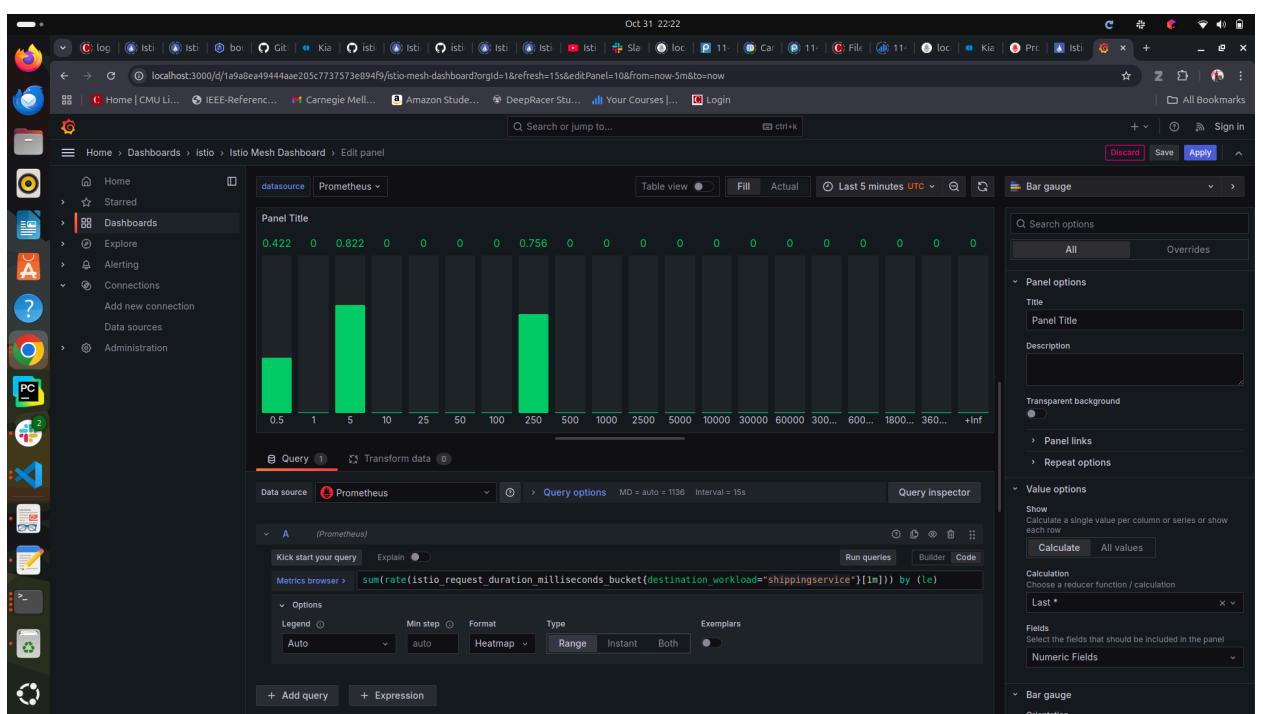
Name	Status
No Istio Config found for checkoutservice	

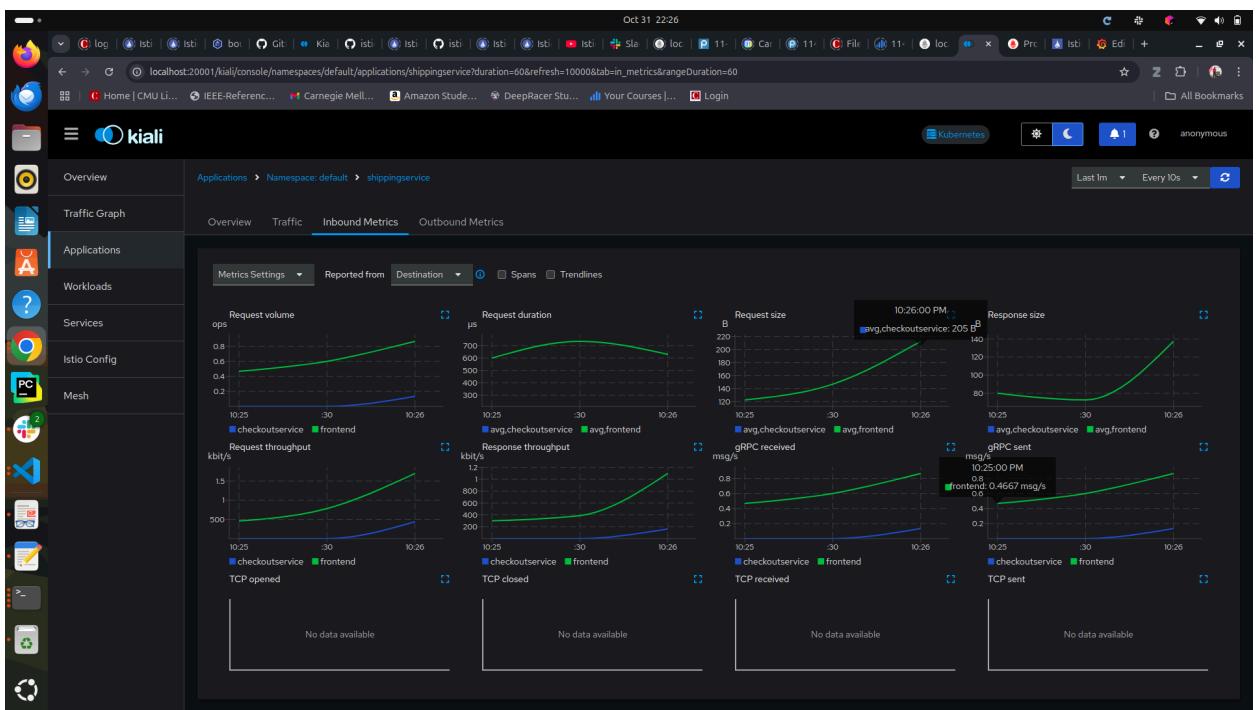
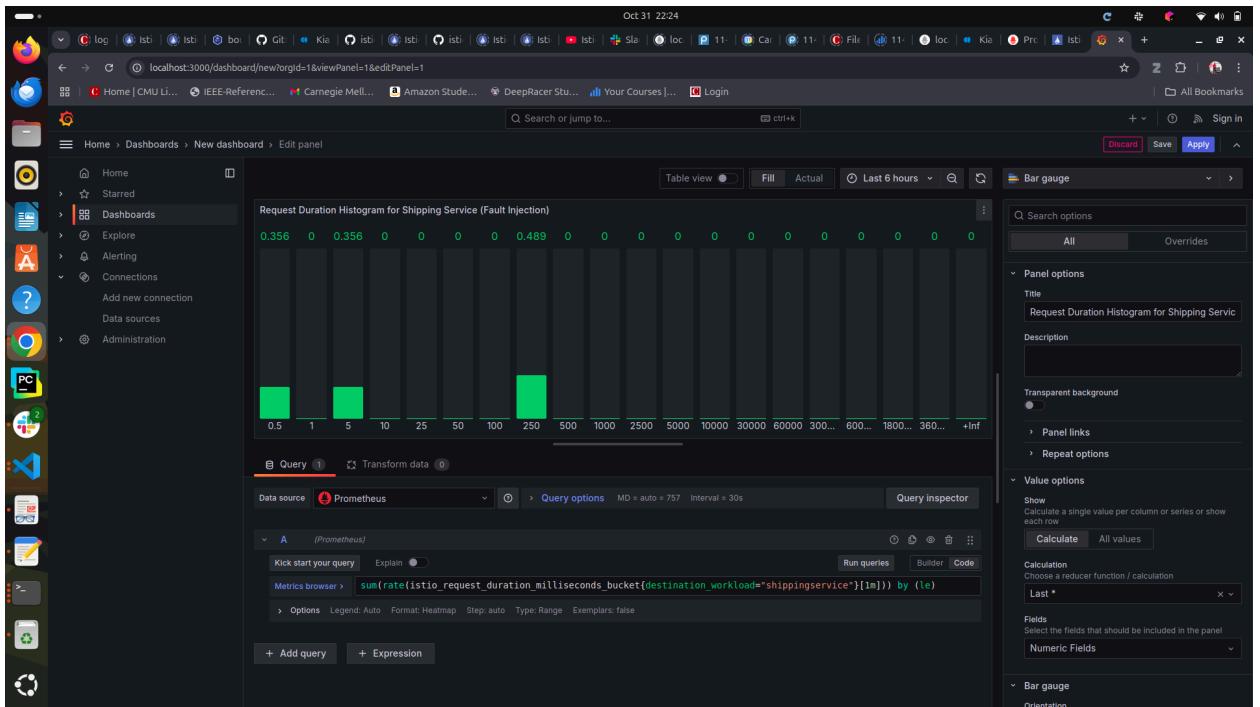


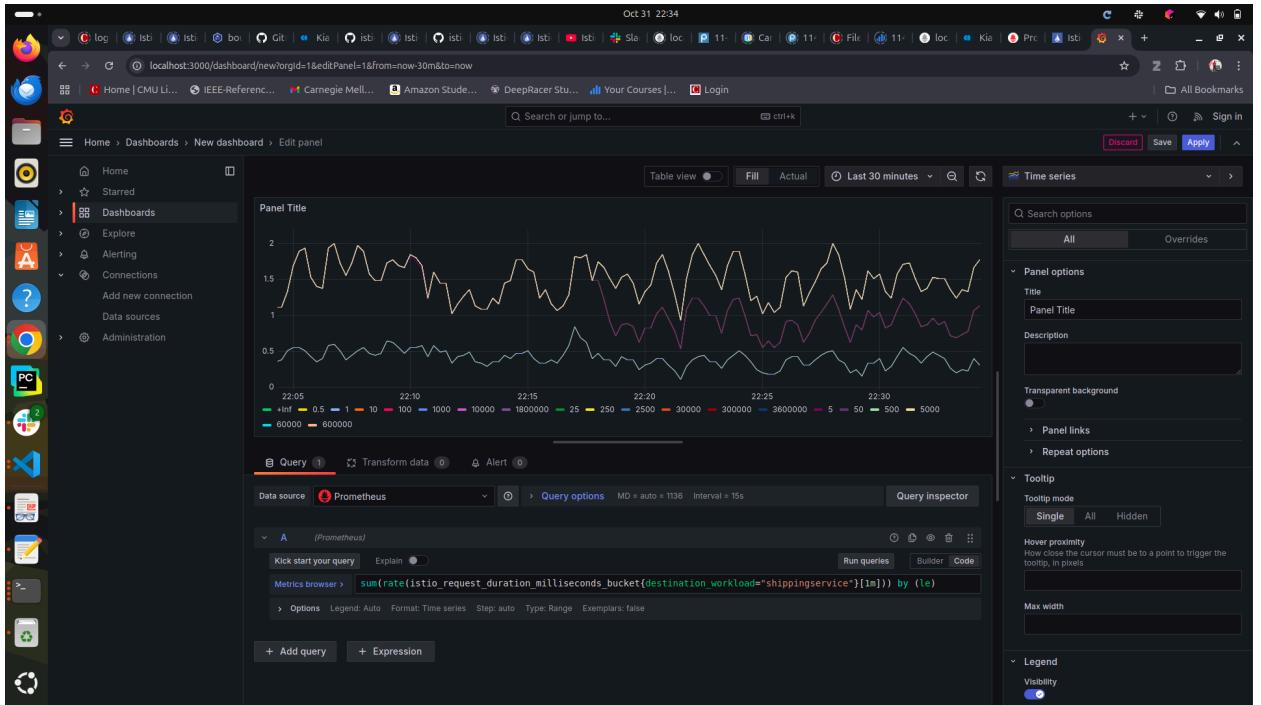


3. screen shot of Grafana histogram with 2 peaks for delayed and normal requests to shipping service

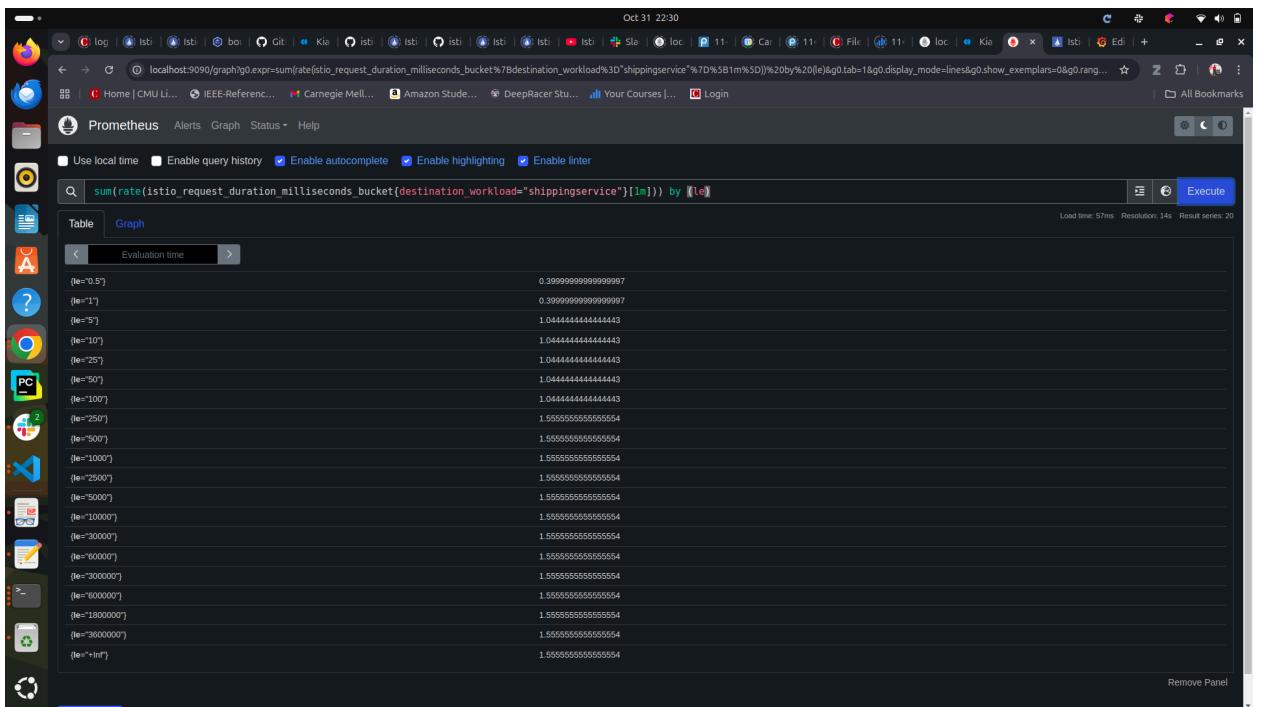
```
Oct 31 16:32 francisberi@beri: ~/Desktop/CMU-Africa/Fall2024/siops/Lab5$ kubectl get pods -n default
recommendationservice-56c9f8f46b-bsjl2 2/2 Running 0 157m
redis-cart-7ff8f4d6ff-djtrk 2/2 Running 0 157m
shippingservice-6cf6fcfd654-q9q88 2/2 Running 0 157m
francisberi@beri: ~/Desktop/CMU-Africa/Fall2024/siops/Lab5$ kubectl describe deployment frontend
Name: frontend
Namespace: default
CreationTimestamp: Thu, 31 Oct 2024 13:14:02 -0700
Labels: app=frontend
Annotations: deployment.kubernetes.io/revision: 1
Selector: app=frontend
Replicas: 1 desired | 1 updated | 1 total | 1 available | 0 unavailable
StrategyType: RollingUpdate
MinReadySeconds: 0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels: app=frontend
  Annotations: sidecar.istio.io/rewriteAppHTTPProbers: true
  Service Account: Frontend
  Containers:
    server:
      Image: gcr.io/google-samples/microservices-demo/frontend:v0.10.1
      Port: 8080/TCP
      Host Port: 0/TCP
      Limits:
        CPU: 200m
        Memory: 128Mi
      Requests:
        CPU: 100m
        Memory: 64Mi
      Liveness: http-get http://:8080/_healthz delay=10s timeout=1s period=10s success=1 #failure=3
      Readiness: http-get http://:8080/_healthz delay=10s timeout=1s period=10s success=1 #failure=3
      Environment:
        PORT: 8080
        PRODUCT_CATALOG_SERVICE_ADDR: productcatalogservice:3550
        CURRENCY_SERVICE_ADDR: currencieservice:7000
        CART_SERVICE_ADDR: cartservice:7070
        RECOMMENDATION_SERVICE_ADDR: recommendationservice:8080
        SHIPPING_SERVICE_ADDR: shippingservice:50051
        CHECKOUT_SERVICE_ADDR: checkoutservice:5050
        AD_SERVICE_ADDR: adservice:9555
        SHOPPING_ASSISTANT_SERVICE_ADDR: shoppingassistantservice:80
        ENABLE_PROFILER: 0
      Mounts:
      Volumes:
      Node Selectors:
Note that you will have to sum over the multiple histogram labels that Prometheus generates depending on the source/destination pairs. Use a "sum by (label)" expression similar to what was shown in class.
```

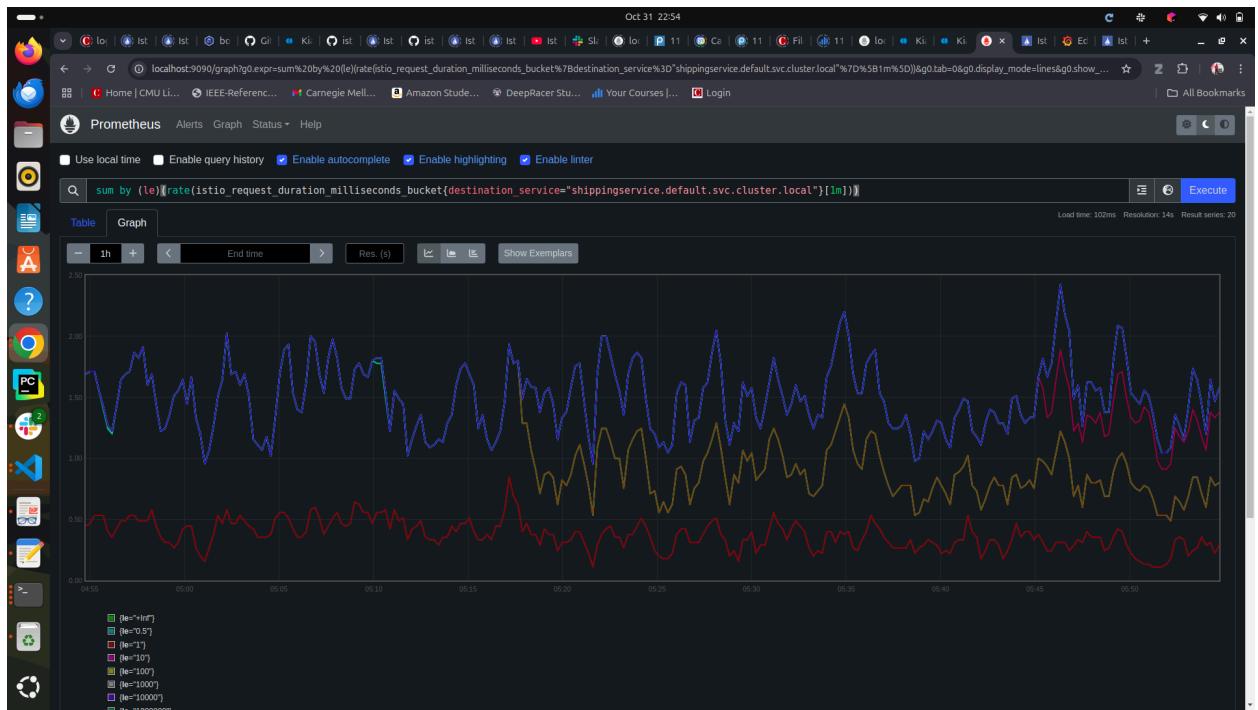
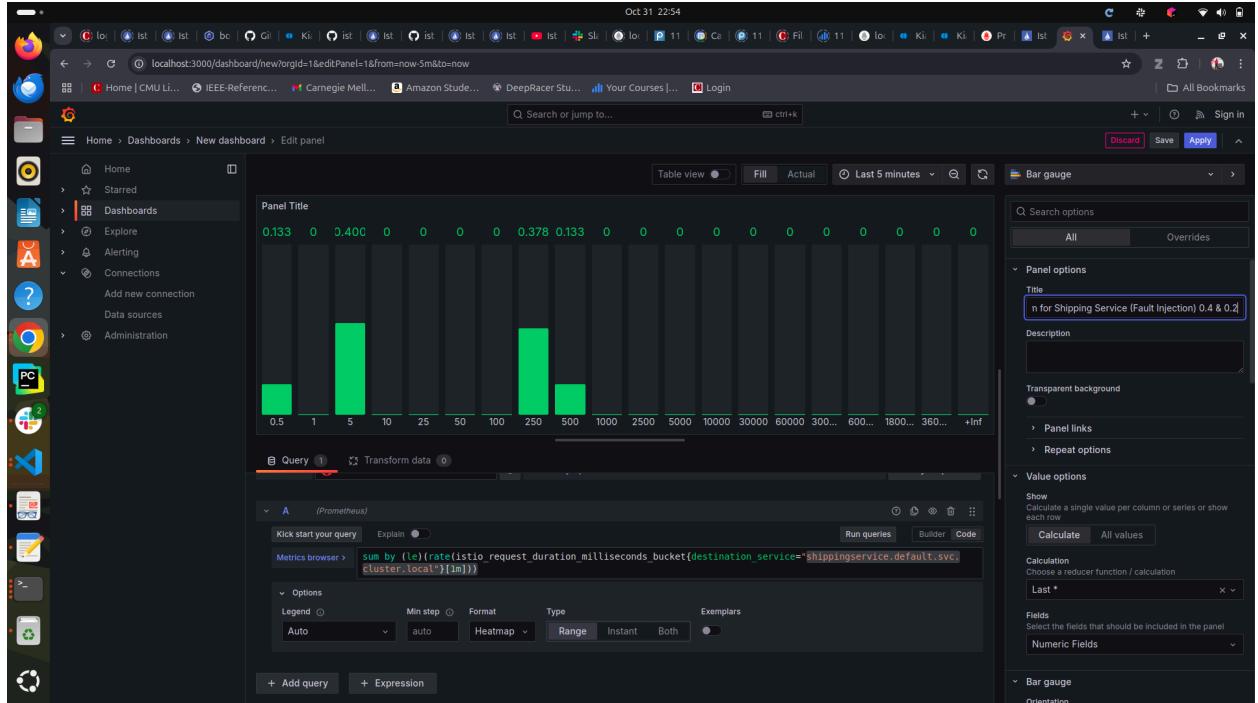


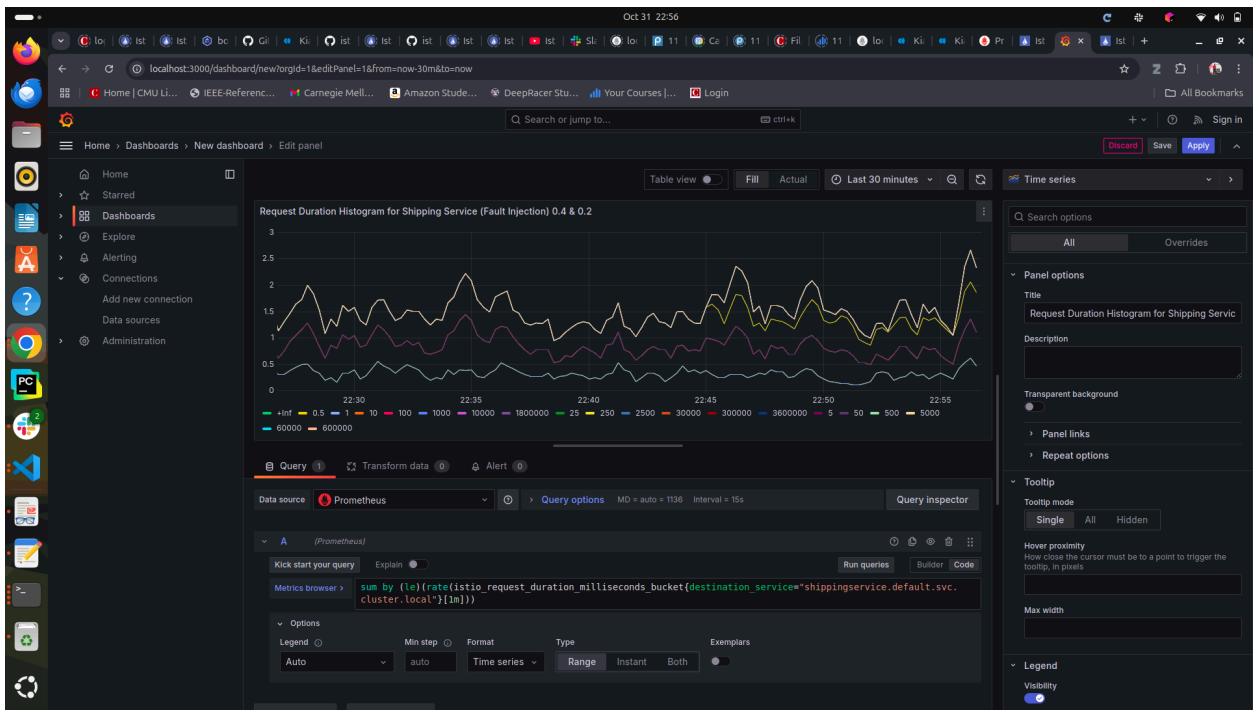
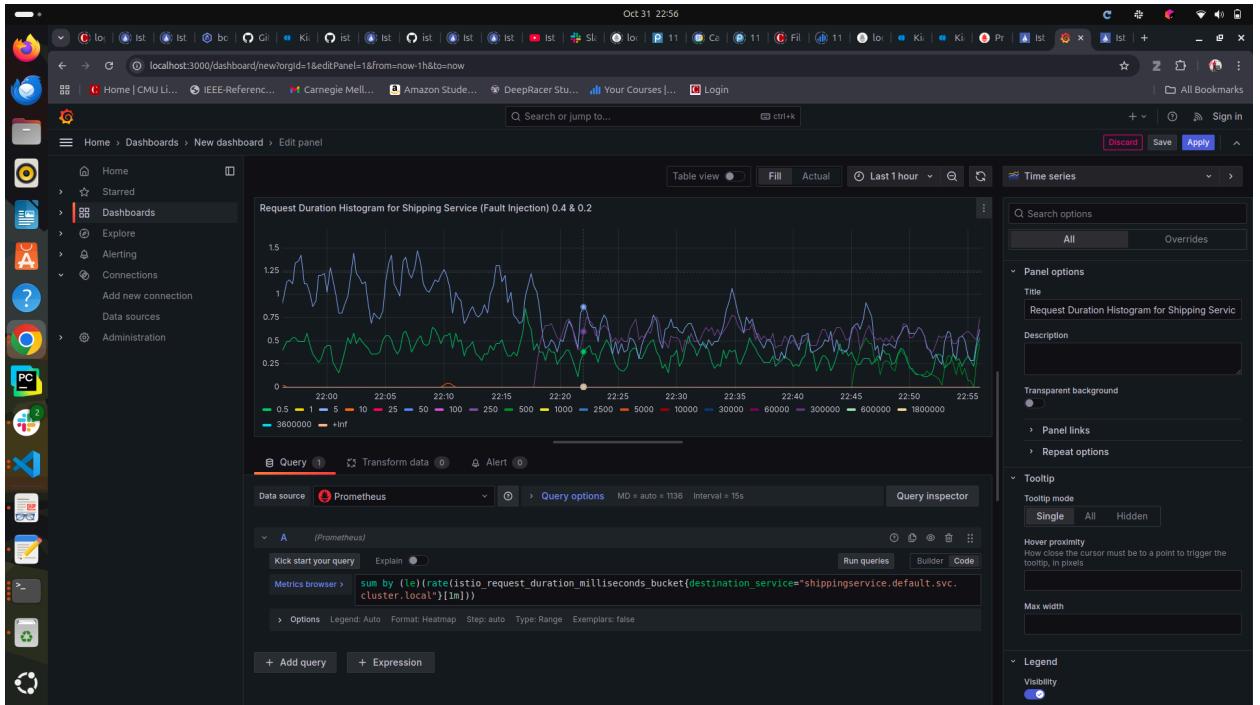




Grafana and Prometheus histogram screen shot showing both 0.4 and 0.2 sec delays to the shipping service.







screen shot from Kiali showing shipping service response times to the Source.

