Part I:

 bash

docker run -d infracloudio/csvserver:latest docker ps -a

Check logs if it's failing:

bash

docker logs container_id

Create gencsv.sh:

**bash

#!/bin/bash** start=$1 end=$2 for i in $(seq $start $end); do echo "$i, $((RANDOM % 1000))" >> inputFile done

Make it executable and run:

Bash

 chmod +x gencsv.sh ./gencsv.sh 2 8

Run container with inputFile:

bash

docker run -d -v $(pwd)/inputFile:/csvserver/inputdata infracloudio/csvserver:latest

Access shell and find port:

bash

docker exec -it container_id /bin/bash netstat -tuln

Note the port, then exit and stop the container.

Run with correct port and environment variable:

bash

docker run -d -p 9393:9300 -v $(pwd)/inputFile:/csvserver/inputdata -e CSVSERVER_BORDER=Orange infracloudio/csvserver:latest

 Generate output:

Bash

curl -o ./part-1-output http://localhost:9393/raw

Generate logs:

bash

docker logs container_name > & part-1-logs

Commit and push changes to GitHub.

Part II:

Stop and remove all containers:

bash

docker stop (dockerps−aq)dockerrm(docker ps -aq)

Create docker-compose.yaml:

yamlCopyversion: '3' services: csvserver: image: infracloudio/csvserver:latest ports: - "9393:9300" volumes: - ./inputFile:/csvserver/inputdata env_file: - csvserver.env

Create csvserver.env:

CSVSERVER_BORDER=Orange

Test with:

bash

docker-compose up -d

Commit and push changes.

Part III:

Stop containers:

bash

docker-compose down

Update docker-compose.yaml:

yamlCopyversion: '3' services: csvserver: image: infracloudio/csvserver:latest ports: - "9393:9300" volumes: - ./inputFile:/csvserver/inputdata env_file: - csvserver.env

prometheus: image: prom/prometheus:v2.45.2 ports: - "9090:9090" volumes: - ./prometheus.yml:/etc/prometheus/prometheus.yml

Create prometheus.yml:

yamlCopyglobal: scrape_interval: 15s

scrape_configs:

- job_name: 'csvserver' static_configs:
  - targets: 'csvserver:9300'

Start services:

bash

docker-compose up -d

Prometheus at http://localhost:9090