Docker Manual Method:

Step 1: Started an ec2 instance

#Run the below command to ensure your package manager is up-to-date:

Step2: sudo yum update -y

For Amazon Linux or Amazon Linux 2, use the following command:

Step 3: sudo yum install -y docker

Start the docker service:

Step 4: sudo service docker start

or

#After installation, start the Docker service and enable it to run on boot:

step 4: sudo systemctl start docker

sudo systemctl enable docker

To run Docker commands without sudo, add your user (typically ec2-user) to the Docker group:

Step 5: sudo usermod -aG docker ec2-user

Restart ec2 instance

Sudo reboot

Step 6: Write a small streamlit program in python file.

Program#

import streamlit as st

import pandas as pd

data = pd.read\_csv('data.csv')

st.write('Original Data', data)

missing\_data = data.isnull().sum().reset\_index()

missing\_data.columns = ['Column', 'Missing Values']

st.write('Missing Values', missing\_data)

Step 7: Saved it and copied it from local machine to ec2

by dragging the file to to SSH browser (SCP) Yellow round icon.

Step 8: Install Python on ec2

sudo yum install python3-pip

step 9: Install Streamlit on ec2

pip install streamlit

Step 10: Open ports to access Streamlit application from internet

o Inbounds Rules

 Add 8501 port in inbounds rule

Then the run the copied file

step 10: streamlit run etl.py

Step 11: copy the external URL given after running the above command.

While copying make sure the program is running sometimes it gets closed.

Copy url and paste it in chrome.

Make sure the url will be like- http://44.204.40.45:8503/

Whatever port number at the end is there like 8503 make changes in your ec2 instance inbound rule.