Step 4

* Skip

Step 5

Change the python in the following to python3:

* RUN apt-get -y update && apt-get -y upgrade && apt-get -y install software-properties-common certbot python-certbot-nginx

So: RUN apt-get -y update && apt-get -y upgrade && apt-get -y install software-properties-common certbot python3-certbot-nginx

Docker commands

docker network create wmap\_network

docker build -t wmap\_nginx\_certbot .

docker create --name wmap\_nginx\_certbot --network wmap\_network --network-alias wmap-nginx-certbot -p 80:80 -p 443:443 -t -v wmap\_web\_data:/usr/share/nginx/html -v $HOME/wmap\_nginx\_certbot/conf:/etc/nginx/conf.d -v /etc/letsencrypt:/etc/letsencrypt -v /var/www/certbot wmap\_nginx\_certbot

docker start wmap\_nginx\_certbot

docker exec -it wmap\_nginx\_certbot /bin/bash

within it run: **certbot certonly –-nginx**

docker create --name wmap\_pgadmin4 --network wmap\_network --network-alias wmap-pgadmin4 -t -v wmap\_pgadmin\_data:/var/lib/pgadmin -e 'PGADMIN\_DEFAULT\_EMAIL=mark.foley@tudublin.ie' -e 'PGADMIN\_DEFAULT\_PASSWORD=mypassword' dpage/pgadmin4

docker create --name wmap\_postgis --network wmap\_network --network-alias wmap-postgis -t -v wmap\_postgis\_data:/var/lib/postgresql -e 'POSTGRES\_USER=docker' -e 'POSTGRES\_PASS=docker' kartoza/postgis

**Push local docker image to dockerhub:**

Create the image again (NOTE – Make sure to run **conda env export --from-history > ENV.yml** first (make sure any packages referenced in settings.py are in it and use pip to install python.app (see how I did it previously in the ca1 project on laptop and GitHub)):

docker buildx build --platform=linux/amd64 -t image name .

docker login --username rosstudublin

docker tag lab4\_ross rosstudublin/awm-ca1

docker push rosstudublin/awm-ca1

**Pull image from dockerhub to VM:**

docker login --username rosstudublin

docker pull rosstudublin/awm-ca1

docker create --name awm-ca1-app --network wmap\_network --network-alias wmap-network-alias -t rosstudublin/awm-ca1

NOTE: Here, this came up when I ran it: WARNING: The requested image's platform (linux/arm64) does not match the detected host platform (linux/amd64) and no specific platform was requested

Add header.conf and servers.conf files:

Ssh into wmap\_nginx\_certbot container:

docker exec -it wmap\_nginx\_certbot /bin/bash

Then, cd into ‘etc’ folder

Then, use vim to create the files and copy and paste the code from the files on my laptop/provided on BrightSpace

Start containers:  
docker start wmap\_postgis

docker start wmap\_pgadmin4

docker start awm-ca1-app

docker start wmap\_nginx\_certbot