Large Scale Computing – lab 5

1. Dockerfile

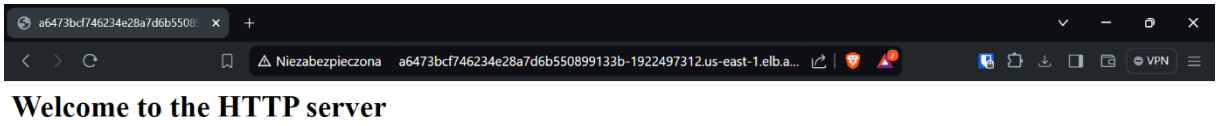
```
FROM alpine:3.19 AS build
RUN apk add --no-cache \
    python3 \
    automake \
    make \
    cmake \
    gcc \
    g++ \
    libc-dev \
    libffi-dev \
    openssl-dev \
    py3-pip \
    curl \
    tar \
    && rm -rf /var/lib/apt/lists/*

ENV AWS_CLI_VERSION=2.18.6
ENV AWS_CLI_SOURCE_URL=https://github.com/aws/aws-cli/archive/refs/tags/${AWS_CLI_VERSION}.tar.gz

RUN curl -L $AWS_CLI_SOURCE_URL -o awscli.tar.gz
RUN tar -xzf awscli.tar.gz && rm awscli.tar.gz
RUN cd aws-cli-${AWS_CLI_VERSION} && ./configure --prefix=/opt/aws-cli/ --with-download-deps && make && make install

FROM alpine:3.19
RUN apk add --no-cache \
    python3 \
    py3-pip \
    && rm -rf /var/lib/apt/lists/*

COPY --from=build /usr/lib/python3.11/site-packages /usr/lib/python3.11/site-packages
COPY --from=build /opt/aws-cli/ /opt/aws-cli/

ENTRYPOINT ["/opt/aws-cli/bin/aws"]
```

Image size & container usage

```
michal@LAPTOP-F1IQTV5O:~$ docker images
REPOSITORY   TAG       IMAGE ID       CREATED              SIZE
awscli       latest    4a9388c1f8e4   About a minute ago   485MB
michal@LAPTOP-F1IQTV5O:~$ docker run --rm -it awscli --version
aws-cli/2.18.6 Python/3.11.10 Linux/5.15.153.1-microsoft-standard-WSL2 source-sandbox/x86_64.alpine.3
```

2. Kubernetes setup repository: https://github.com/michwoj01/lsc-kubernetes

Nginx page after deploying service linked with deployment pods (AWS CLB link):



Welcome to the HTTP server