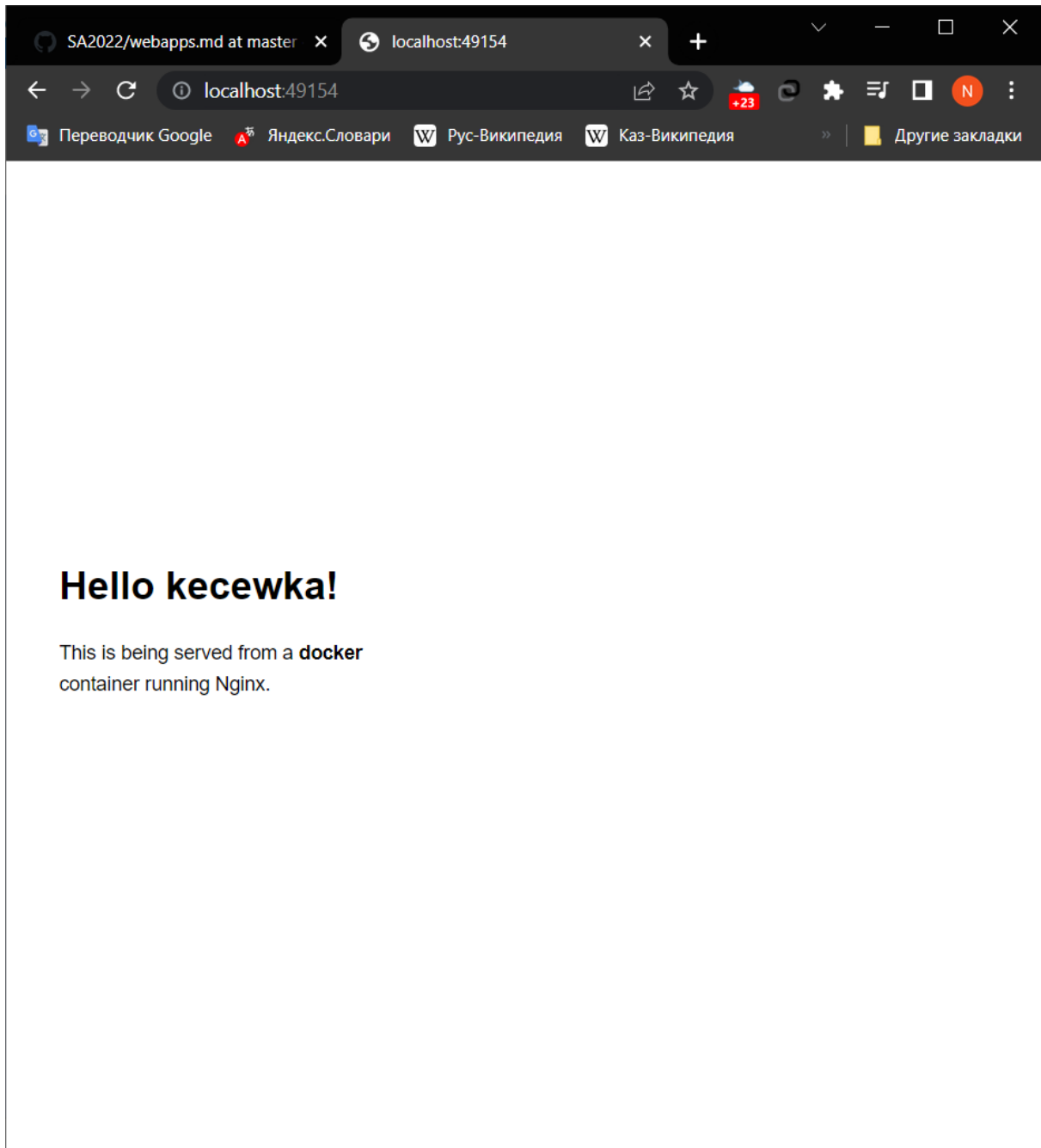
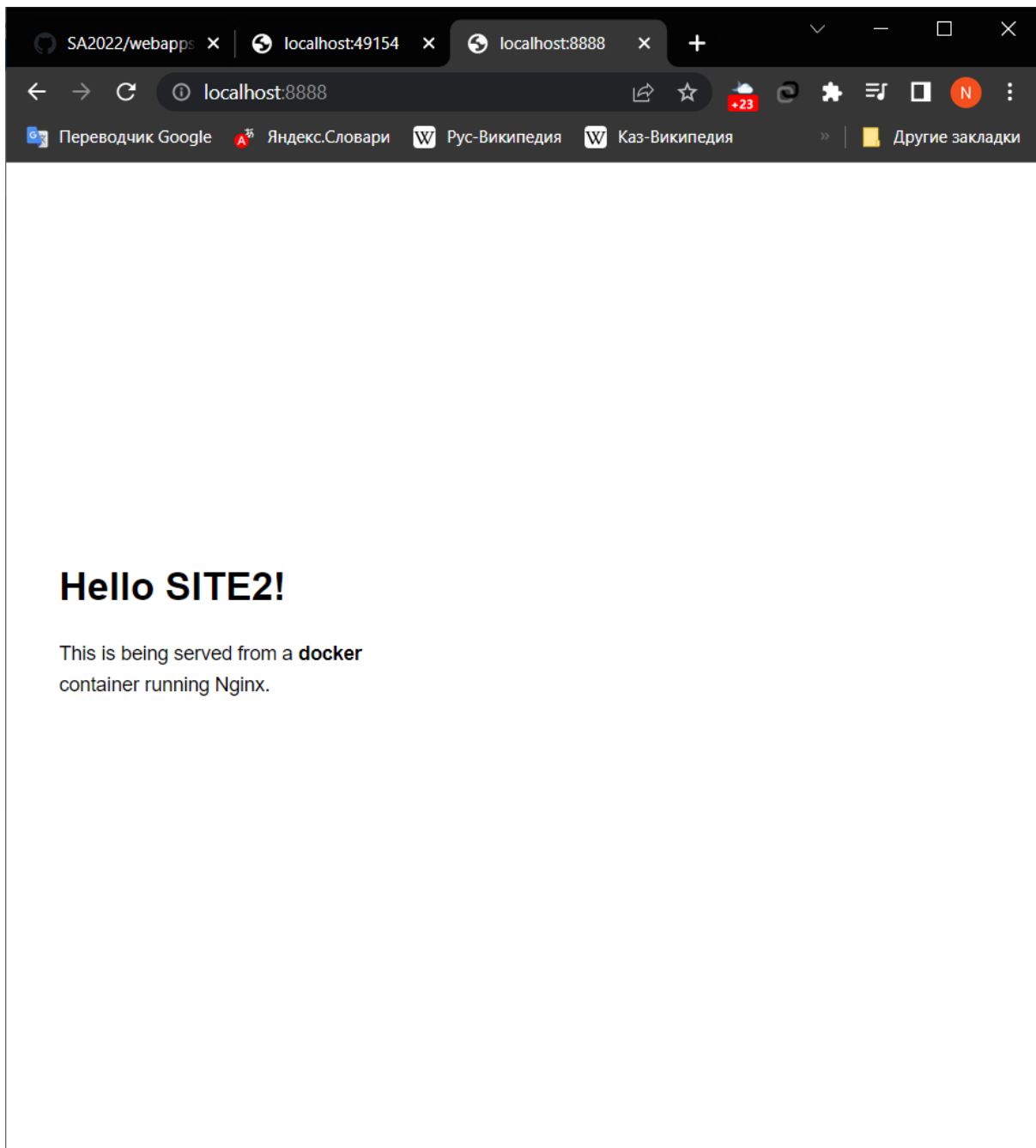


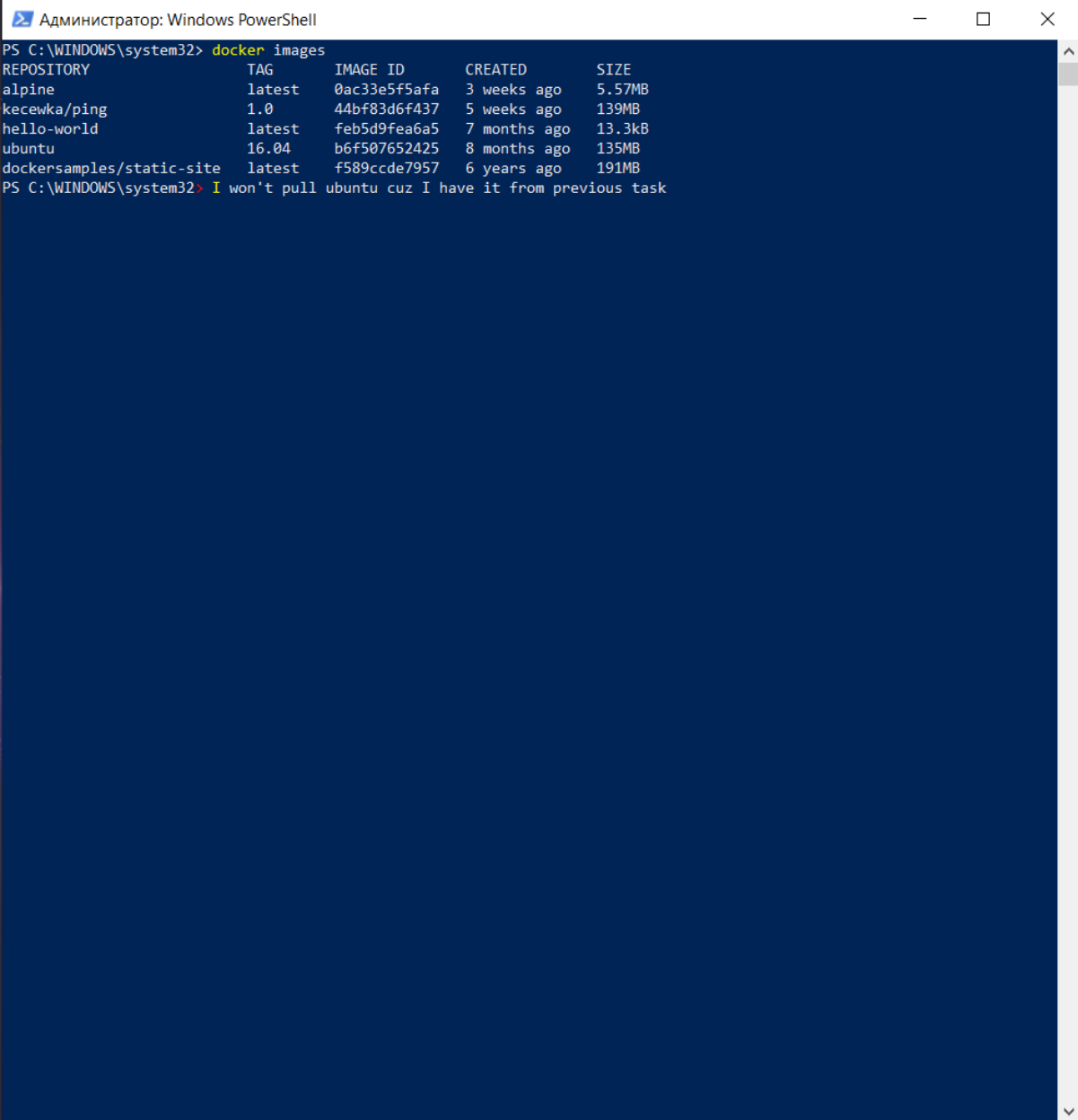
2.1 Run a static website in a container

```
Администратор: Windows PowerShell
Status: Downloaded newer image for dockersamples/static-site:latest
docker.io/dockersamples/static-site:latest
PS C:\WINDOWS\system32> docker run -d dockersamples/static-site
c1a6d86fbf582fa97f9a80562775b6b6369e32595e123c4388d9304b9b69b5e6
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
c1a6d86fbf58   dockersamples/static-site          "/bin/sh -c 'cd /usr..." 5 minutes ago  Up 5 minutes  80/tcp, 443/tcp  optimistic_almeida
PS C:\WINDOWS\system32> docker stop c1a
c1a
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
PS C:\WINDOWS\system32> docker rm c1a
c1a
PS C:\WINDOWS\system32> docker run --name static-site -e AUTHOR=kecewka -d -P dockersamples/static-site
372ebf9775629ede1a7467e00d2f2e1e0cafb96a054c2dd7693a23130a4343a8
PS C:\WINDOWS\system32> docker port static-site
443/tcp -> 0.0.0.0:49153
80/tcp -> 0.0.0.0:49154
PS C:\WINDOWS\system32> docker-machine ip default
PS C:\WINDOWS\system32> docker stop static-site
static-site
PS C:\WINDOWS\system32> docker rm static-site
static-site
PS C:\WINDOWS\system32> docker run --name static-site-2 -e AUTHOR=SITE2 -d -p 8888:80 dockersamples/static-site
751e1f3799bd3e8d782300ef79be2538192aa55aa3198bdf564d65183a4cfc0a
PS C:\WINDOWS\system32> docker port static-site-2
80/tcp -> 0.0.0.0:8888
PS C:\WINDOWS\system32> docker rm -f static-site-2
static-site-2
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
PS C:\WINDOWS\system32>
```



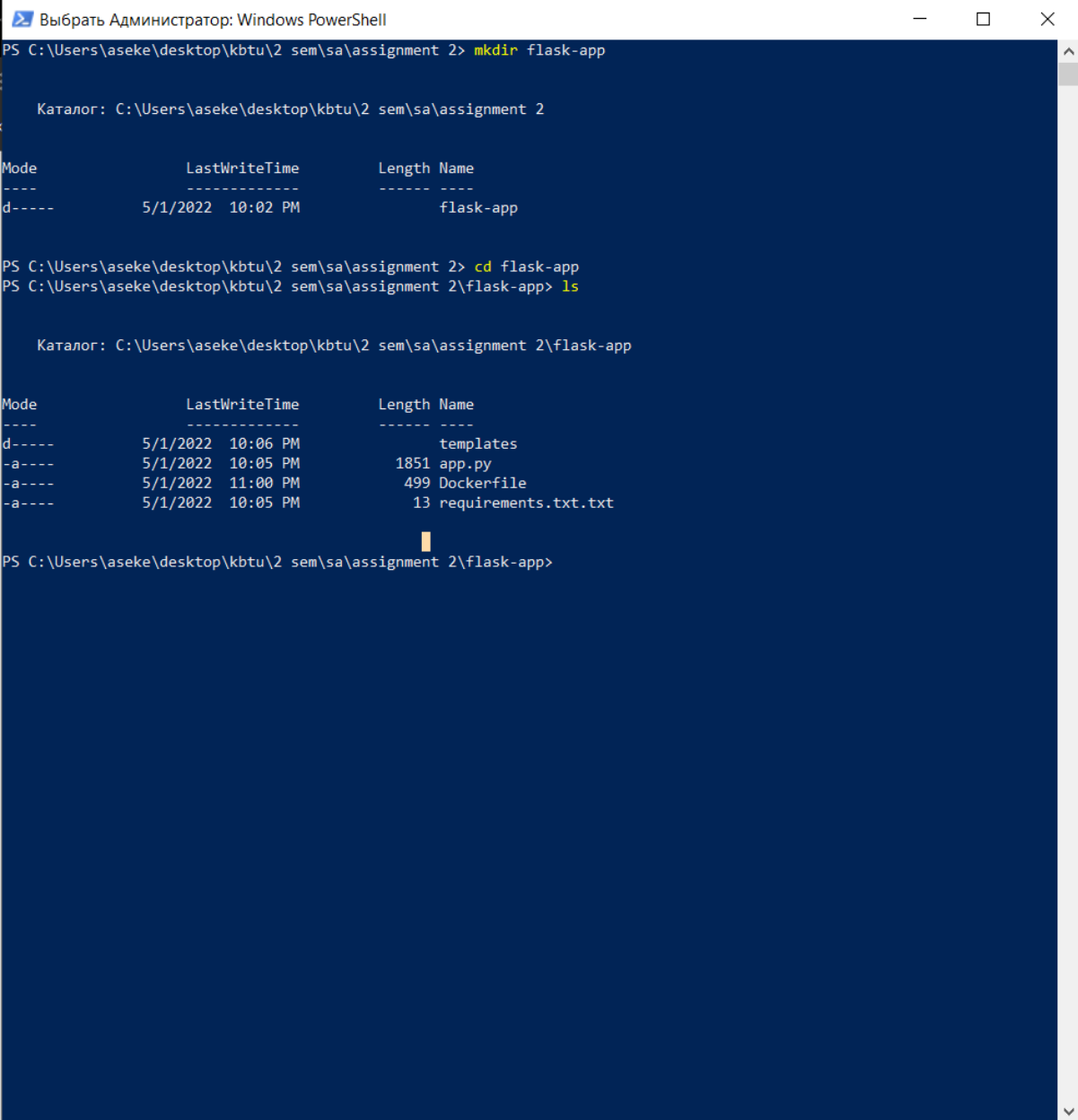


2.2 Docker Images

A screenshot of a Windows PowerShell terminal window titled "Администратор: Windows PowerShell". The terminal shows the command "docker images" being executed, which lists several Docker images. The output is a table with columns: REPOSITORY, TAG, IMAGE ID, CREATED, and SIZE. The images listed are alpine, kecewka/ping, hello-world, ubuntu, and dockersamples/static-site. Below the table, a comment states: "I won't pull ubuntu cuz I have it from previous task".

```
PS C:\WINDOWS\system32> docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
alpine              latest      0ac33e5f5afa  3 weeks ago   5.57MB
kecewka/ping        1.0        44bf83d6f437  5 weeks ago   139MB
hello-world         latest      feb5d9fea6a5  7 months ago  13.3kB
ubuntu              16.04      b6f507652425  8 months ago  135MB
dockersamples/static-site latest      f589ccde7957  6 years ago   191MB
PS C:\WINDOWS\system32> I won't pull ubuntu cuz I have it from previous task
```

2.3 Create your first image



```
Выбрать Администратор: Windows PowerShell
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2> mkdir flask-app

Каталог: C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2

Mode                LastWriteTime         Length Name
----                -
d-----          5/1/2022  10:02 PM             flask-app

PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2> cd flask-app
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app> ls

Каталог: C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app

Mode                LastWriteTime         Length Name
----                -
d-----          5/1/2022  10:06 PM             templates
-a-----          5/1/2022  10:05 PM          1851 app.py
-a-----          5/1/2022  11:00 PM           499 Dockerfile
-a-----          5/1/2022  10:05 PM           13 requirements.txt.txt

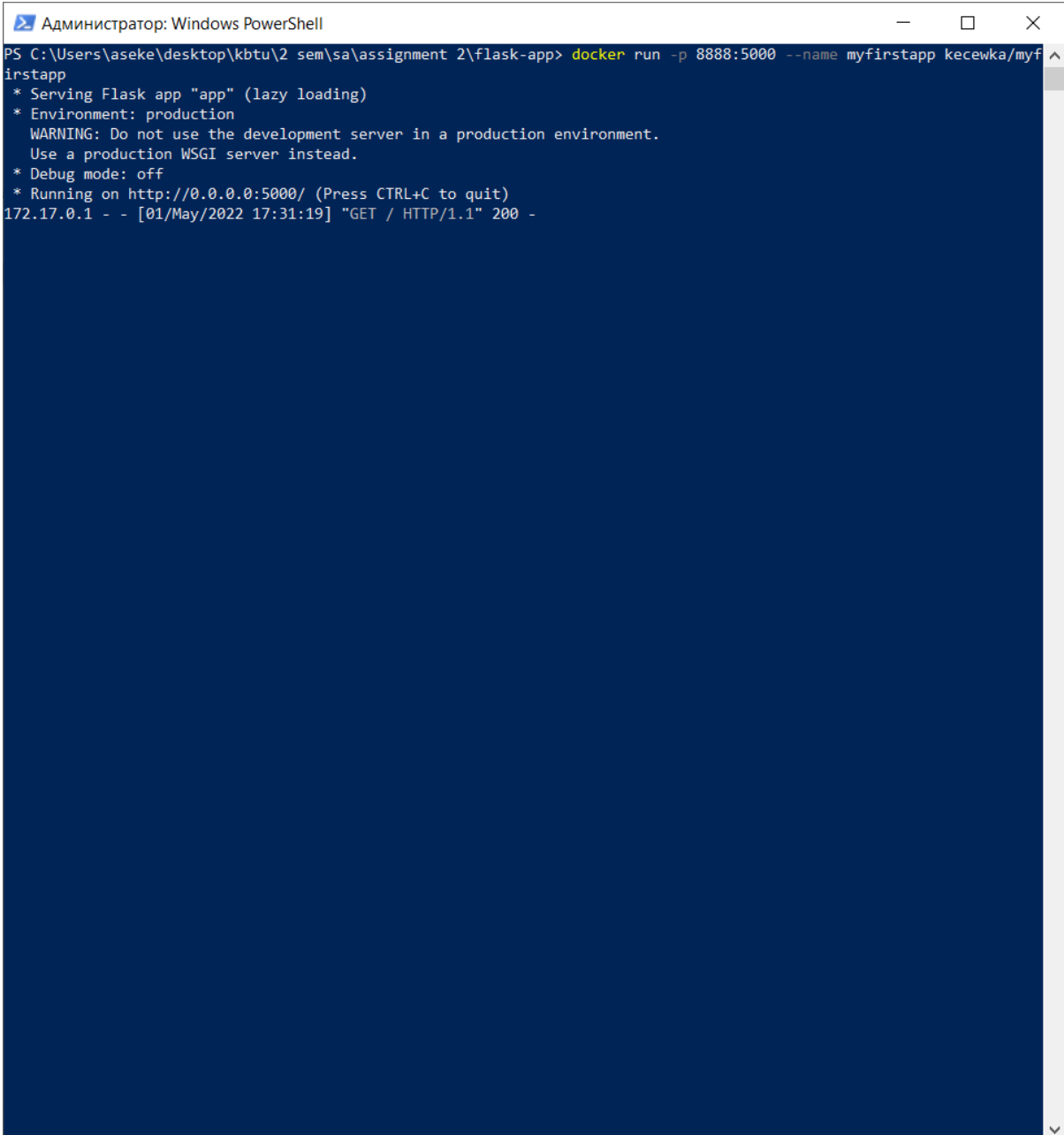
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app>
```

2.3.3 Build the image

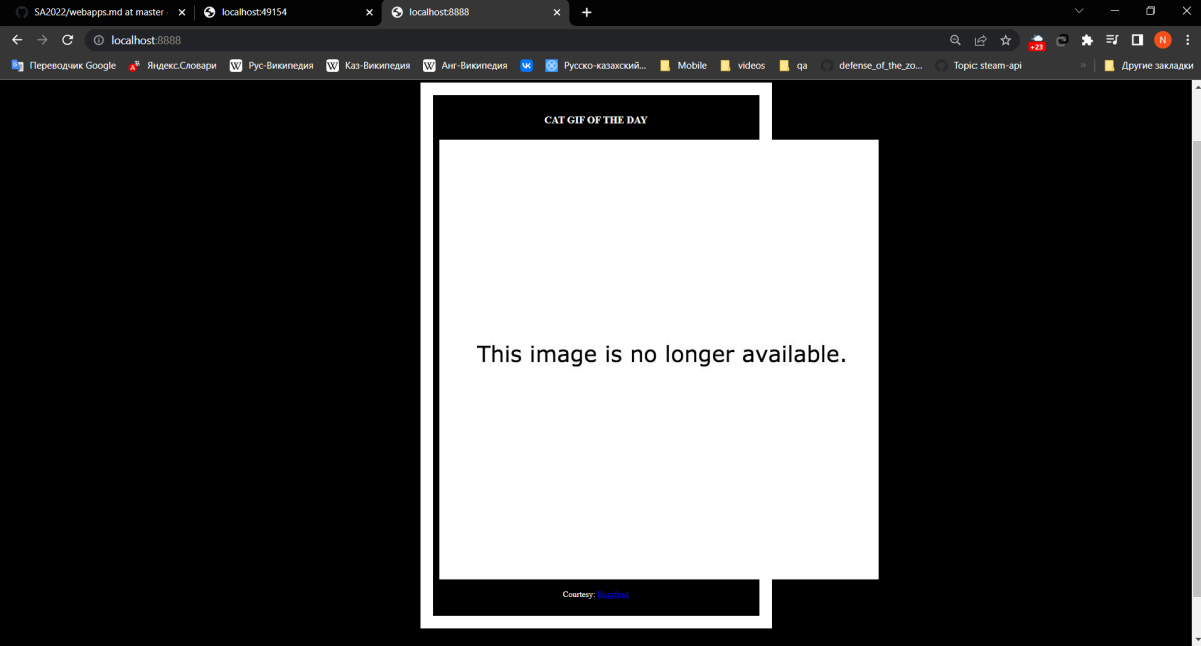
```
Выбрать Администратор: Windows PowerShell
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app> docker build -t 'kecewka/myfirstapp' .
[+] Building 9.7s (12/12) FINISHED
=> [internal] load build definition from Dockerfile                                0.1s
=> => transferring dockerfile: 602B                                              0.0s
=> [internal] load .dockerignore                                                  0.0s
=> => transferring context: 2B                                                  0.0s
=> [internal] load metadata for docker.io/library/alpine:3.3                    1.2s
=> [internal] load build context                                                0.0s
=> => transferring context: 132B                                                0.0s
=> [1/7] FROM docker.io/library/alpine:3.3@sha256:66952b313e51c3bd1987d7c4dd75d8a9bc0fb6e524eed2448fa60346b3 0.0s
=> CACHED [2/7] RUN apk add --update py2-pip                                    0.0s
=> CACHED [3/7] RUN pip install --upgrade pip                                  0.0s
=> [4/7] COPY requirements.txt /usr/src/app/requirements.txt                    0.1s
=> [5/7] RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt        6.8s
=> [6/7] COPY app.py /usr/src/app/                                              0.1s
=> [7/7] COPY templates/index.html /usr/src/app/templates/                     0.1s
=> exporting to image                                                            1.2s
=> => exporting layers                                                            1.2s
=> => writing image sha256:57eab6ab7afd69cc194b1ef5466db68c1b87e77f659771a1df78049a86ed6881 0.0s
=> => naming to docker.io/kecewka/myfirstapp                                    0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app> █
```

2.3.4 Run your image

A screenshot of a Windows PowerShell terminal window titled "Администратор: Windows PowerShell". The terminal shows the execution of the command `docker run -p 8888:5000 --name myfirstapp kecewka/myfirstapp`. The output indicates that the Flask application is running in production mode on port 5000, with a warning to use a production WSGI server. A successful HTTP GET request is also shown.

```
PS C:\Users\aseke\desktop\kbtu\2 sem\sa\assignment 2\flask-app> docker run -p 8888:5000 --name myfirstapp kecewka/myfirstapp
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: Do not use the development server in a production environment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
172.17.0.1 - - [01/May/2022 17:31:19] "GET / HTTP/1.1" 200 -
```



2.3.4 Push your image

```
Администратор: Windows PowerShell
Windows PowerShell
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.

Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)

PS C:\WINDOWS\system32> docker images -a
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
kecewka/myfirstapp   latest          57eab6ab7afd    5 minutes ago   67.7MB
alpine               latest          0ac33e5f5afa    3 weeks ago     5.57MB
kecewka/ping         1.0            44bf83d6f437    5 weeks ago     139MB
hello-world          latest          feb5d9fea6a5    7 months ago    13.3kB
ubuntu               16.04          b6f507652425    8 months ago    135MB
dockersamples/static-site latest          f589ccde7957    6 years ago     191MB

PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED         STATUS         PORTS
33e2c6558cb2   kecewka/myfirstapp "python /usr/src/app..." 3 minutes ago   Up 3 minutes   0.0.0.0:8888->5000/tcp
myfirstapp

PS C:\WINDOWS\system32> docker stop 33e
33e
PS C:\WINDOWS\system32> docker rm 33e
33e
PS C:\WINDOWS\system32> docker login
Authenticating with existing credentials...
Login Succeeded
PS C:\WINDOWS\system32> docker push kecewka/myfirstapp
Using default tag: latest
The push refers to repository [docker.io/kecewka/myfirstapp]
68ed6c51378b: Pushed
7f567a3c8c18: Pushed
c553f28d78eb: Pushed
823999310b9e: Pushed
a68b9b831c80: Pushed
fdaea8750766: Pushed
f566c57e6f2d: Mounted from library/alpine
latest: digest: sha256:872a6e033c1166f36897af7acdfe71290373ed32e8be6baea4dbe187f56448d7 size: 1783
PS C:\WINDOWS\system32>
```